2006-12

A critical analysis of the coordination, command and control of contractors in Iraq

Butkus, Joseph J.

Monterey, California. Naval Postgraduate School

NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

MBA PROFESSIONAL REPORT

A Critical Analysis of the Coordination, Command and Control of Contractors in Iraq

---

By: **Joseph J. Butkus,**
Matthew F. Howes
December 2006

Advisors: **E. Cory Yoder,**
Ronald Tudor

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.			
1. AGENCY USE ONLY *(Leave blank)*	**2. REPORT DATE** December 2006	**3. REPORT TYPE AND DATES COVERED** MBA Professional Report	
4. TITLE AND SUBTITLE: A Critical Analysis of the Coordination, Command and Control of Contactors in Iraq.			**5. FUNDING NUMBERS**
6. AUTHOR(S) Joseph J. Butkus and Matthew F. Howes			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			**8. PERFORMING ORGANIZATION REPORT NUMBER**
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			**10. SPONSORING / MONITORING AGENCY REPORT NUMBER**
11. SUPPLEMENTARY NOTES The views expressed in this report are those of the author(s) and do not reflect the official policy or position of the Department of Defense or the US Government.			
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			**12b. DISTRIBUTION CODE** A

13. ABSTRACT (maximum 200 words)

The purpose of this project is to examine the issues concerning the command and control of civilian contractors in a combat environment. Outsourcing of non-military specific job functions to civilian contractors and the increased reliance on Private Security Companies to protect those contractors has produced unexpected complications when examined in the context of an extended war-time scenario. The objectives of this project are to identify the weaknesses of current command and control doctrine as it applies to civilian contractors, identify significant issues regarding tracking and movement control of contractors and to identify issues faced by tactical commanders created by civilian contractors operating in their battlespace. The product of this project will be a potential course of action that the Department of Defense can pursue to correct deficiencies in the command and control of contractors and mitigate the risks created by contractors operating independently on the battlefield.

14. SUBJECT TERMS Contingency, Contracting, Contingency Contracting, Private Security Company, Private Military Firm, Reconstruction Operations Center, Command, Control, Movement Control			**15. NUMBER OF PAGES 113**
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	**18. SECURITY CLASSIFICATION OF THIS PAGE** Unclassified	**19. SECURITY CLASSIFICATION OF ABSTRACT** Unclassified	**20. LIMITATION OF ABSTRACT** UL

NSN 7540-01-280-5500 Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. 239-18

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

A CRITICAL ANALYSIS OF THE COORDINATION, COMMAND AND CONTROL OF CONTRACTORS IN IRAQ

Joseph J. Butkus, Major, United States Marine Corps
Matthew F. Howes, Major, United States Marine Corps

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

from the

NAVAL POSTGRADUATE SCHOOL
December 2006

Authors: _____
Joseph J. Butkus

_____
Matthew F. Howes

Approved by: _____
E. Cory Yoder, Lead Advisor

_____
Ronald Tudor, Support Advisor

_____
Robert N. Beck, Dean
Graduate School of Business and Public Policy

THIS PAGE INTENTIONALLY LEFT BLANK

A CRITICAL ANALYSIS OF THE COORDINATION, COMMAND AND CONTROL OF CONTRACTORS IN IRAQ

ABSTRACT

The purpose of this project is to examine the issues concerning the command and control of civilian contractors in a combat environment. Outsourcing of non-military specific job functions to civilian contractors and the increased reliance on Private Security Companies to protect those contractors has produced unexpected complications when examined in the context of an extended war-time scenario. The objectives of this project are to identify the weaknesses of current command and control doctrine as it applies to civilian contractors, identify significant issues regarding tracking and movement control of contractors and to identify issues faced by tactical commanders created by civilian contractors operating in their battlespace. The product of this project will be a potential course of action that the Department of Defense can pursue to correct deficiencies in the command and control of contractors and mitigate the risks created by contractors operating independently on the battlefield.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

Overview

Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) introduced the capability of the military forces of the United States to wage a new kind of war. This brand of warfare is dynamic and rapidly changing to meet new challenges on a daily basis. Our warriors are part of a force that is more mobile and agile, capable of moving about the battlefield with unprecedented speed.

One of the changes that enabled this agility is an increase in the reliance of contracted service support for operational forces on the battlefield. Transferring many service support functions to civilian contractors allowed the commanders to focus their attention on combat forces rather than on mundane support functions.

While the increased use of contractors to provide services on the battlefield created benefits to the operational forces, it also created many unintended consequences. These negative effects include basic issues such as unexpected termination of services or duplication of services at additional costs. There are also more severe negative effects including kidnappings and loss of life.

In an attempt to provide a means to coordinate the efforts of the hundreds of thousands of contractor personnel in Iraq, the Department of Defense assisted in the establishment of the Reconstruction Operations Center (ROC). The ROC was intended to provide a central coordination node for contractor activity in Iraq.

The development of the ROC sought to reduce and mitigate these kinds of occurrences by providing a means for contractors to coordinate and communicate with military forces operating in the area. The ROC would provide a daily threat assessment based on information gathered from the DoD, the Department of State and contractors operating in the area. The ROC would also provide a means to track the movement of contractors so the military commanders would be aware of who was transiting their area. Additionally, the ROC would provide a communication life-line to contractors who became the victims of insurgent fires or improvised explosive devices.

In order to rapidly bring the ROC online in Iraq, without taking away forces from operational missions, the decision was made to contract out the management of the ROC. In June of 2004, the contract to manage the ROC was awarded to AEGIS Defence, a British Private Security Company. AEGIS continues to manage the ROC up to the time of publication.

Purpose of the Project

The objective of this report is to conduct an analysis of command and control relationships between civilian contractors and military units on the battlefield and identify any weaknesses in those relationships. Through the results of this analysis, the authors will seek to identify several courses of action the Department of Defense could pursue in order to improve the command and control relationship between contractors and major subordinate commands (MSC) on the battlefield.

Findings

The unprecedented number of contractors supporting the operational forces in OIF has created a coordination problem that is significant and difficult to control. The presence of this large civilian force operating in close quarters with military forces has, at times, placed both the contractors and the military in dangerous situations that could have been avoided with proper coordination. For example, contractors who were unaware of the locations of military checkpoints have inadvertently fired on those checkpoints. Military forces that are unaware of a contractor convoy transiting their area have fired on contractor vehicles that have refused to stop. Contractors have unknowingly transited areas of increased insurgent activity in Iraq, because they did not have the means to receive updated threat assessments.

The DoD lacked a doctrinal approach to the management and coordination of contractors operating independently on the battlefield. The sheer number of contractors necessary for reconstruction operations in Iraq was not planned for in OPlan 1003.

The creation of the ROC was the first step in the incremental development of contractor coordination processes that continues to date. Considering the complexity of the situation, the ROC has been quite successful at developing methods of tracking

contractor movement and providing a communications bridge between contractors and military forces.

Contractors are not required to use the coordination services provided by the ROC. Participation in the ROC is voluntary and left to the discretion of each contractor. Those contractors who choose not to participate in the ROC effectively remain invisible and anonymous to the military forces operating nearby. With no means to effectively communicate, these contractors will be unable to request assistance in the event of an emergency.

Despite the fact that the ROC is functioning as a critical coordination node on the battlefield, the management of the ROC has remained in the hands of a contractor, AEGIS Defence Services. The DoD has not taken steps to ensure continuation of services provided by the ROC in the event of contract termination or default on the part of AEGIS.

Recommendations

In order to preserve the lessons learned in OIF and continue the successful coordination processes created by the ROC, the following recommendations are made;

1. Publish Joint Doctrine defining the role of the Reconstruction Operations Center.
2. Make the oversight and control of the ROC a military function.
3. Mandate participation in the ROC for all contractors.
4. Increase the strategic and operational level of contracting planning.
5. Develop pre-deployment training for command staffs concerning contractor operations and the ROC.

Conclusions

The system that developed in Iraq, of using regional ROCs supported and coordinated by a national ROC, has grown into a highly capable coordination system, but it requires subtle changes to make it more effective. Mandatory participation by all contractors and more effective coordination with military forces will increase the benefits

that are attained. Ultimately this will lead to increased coordination between contractors that will reduce duplication of effort and more importantly will reduce the incidence of friendly fire and contractor deaths.

The coordination function performed by the ROC should be viewed as a critical military function on the battlefield. The ROC should receive a level of support similar to a Joint Operations Center. The increased reliance on contractor provided services to sustain military operations demands that the DoD take a more hands-on approach to coordinating the movement and actions of contractors on the battlefield.

The ROC is a vital function when contractors are operating independently on the battlefield. This critical coordination center should not be a contracted function, but should be established as a military command defined by joint doctrine. The tactics, techniques, procedures and lessons learned must be preserved so this function may be repeated in the next conflict without experiencing the same steep, and deadly, learning curve.

I. INTRODUCTION

A. BACKGROUND

Contractor support for military operations has grown significantly over the last two decades. Independent estimates place the total number of civilian contractors employed by the DoD in Iraq well above 200,000. The tasks performed by contractors have expanded from traditional support roles to critical activities without which many expeditionary operations could not be sustained by military personnel. The unprecedented number of contractors supporting the operational forces in OIF created a coordination problem that is significant and difficult to control. The presence of this large civilian force operating in close quarters with military forces has, at times, placed both the contractors and the military in dangerous situations that could have been avoided with proper coordination.

> US troops in Iraq suffered through months of unnecessarily poor living conditions because some civilian contractors hired by the Army for logistics support failed to show up, Army officers said. Months after American combat troops settled into occupation duty, they were camped out in primitive, dust-blown shelters without windows or air conditioning. The Army has invested heavily in modular barracks, showers, bathroom facilities and field kitchens, but troops in Iraq were using ramshackle plywood latrines and living without fresh food or regular access to showers and telephones. Even mail delivery—also managed by civilian contractors—fell weeks behind.
>
> (Wood, 2003)

Though living conditions in Iraq have improved, problems such as these raise new concerns about the Pentagon's growing global reliance on defense contractors for everything from laundry service to combat training and aircraft maintenance. Civilians help operate Navy Aegis cruisers and Global Hawk, the high-tech, robot spy plane that provides the aerial footage featured so prominently on the evening news. Civilian contractors may work well enough in peacetime, critics say, but what about in a crisis?

"We thought we could depend on industry to perform these kinds of functions," Lt. Gen. Charles S. Mahan, the Army's logistics chief, said in an interview.

"You cannot order civilians into a war zone," said Linda K. Theis, an official at the Army's Field Support Command, which oversees some civilian logistics contracts. "People can sign up to that—but they can also back out." (Wood, 2003)

In yet another example, on April 4th, 2004, just days after the brutal killing of four Blackwater employees near Fallujah, the company once again found itself isolated and the subject of attacks by anti-coalition forces. This time in Najaf, a city approximately 100 miles south of Baghdad, eight Blackwater employees contracted to provide security for the Coalition Provisional Authority (CPA) Headquarters withstood sniper, rocket propelled grenade and assault rifle attacks. For up to three and a half hours the private security team repelled the attacks before local military forces could be mustered to come to their relief. As a result, Blackwater initiated their own resupply mission using their private inventory of helicopters to deliver ammunition and evacuate wounded.

> A Defense Department spokesman said that there were no military reports about the opening hours of the siege on the CPA headquarters in Najaf because there were no military personnel on the scene. The Defense Department often does not have a clear handle on the daily actions of security contractors because the contractors work directly for the coalition authority, which coordinates and communicates on a limited basis through the normal military chain of command.
>
> (Priest, 2004)

The two examples illustrated above demonstrate the complications and difficulties that have risen as a result of the DoD's increasing reliance on civilian contractors. Well into three years of Operation Iraqi Freedom and Operation Enduring Freedom (OIF/OEF), the US military has made use of an unprecedented level of contractor support on the battlefield. While the contracting system has arguably proven flexible enough to deal with these changes, command and control of civilians on the battlefield has struggled

under the heavy strain of this new and complex burden. The increased involvement has required contractors to become more closely integrated with the tactical units they support. Contractors frequently work directly with operational military units, while the contracting officers responsible for overseeing and administering these contracts are located hundreds if not thousands of miles away.

OIF also introduced the US military to the concept of Private Military Firms (PMFs)[1] at an unprecedented and never before seen rate. Never before has the US military had to work so closely with and rely on these loosely regulated paramilitary organizations. The interaction and co-mingling with both reconstruction and military operations has produced significant issues never before encountered by the United States military.

Despite these fundamental changes in US doctrine, the DoD continues to rely on existing command and control methods. Existing methods make use of common communications equipment, training levels and liaison officers/teams with clearly defined roles and reporting. These methods are simply not applicable to civilian contractors. Conversely, the private security industry has struggled to balance a sense of duty and patriotism with their overall goal of making a profit and long-term financial success.

B. OBJECTIVES OF THE RESEARCH

The objective of this report is to conduct an analysis of command and control relationships between civilian contractors and military units on the battlefield and identify any weaknesses in those relationships. Through the results of this analysis, the authors will seek to identify several courses of action that the DoD could pursue in order

[1] Private Military Firm, Private Security Company, Private Military Company, Private Security Contractors and Security Contractors are names and titles used to describe business organizations that provide professional services associated with warfare. They specialize in the provision of military skills, including combat operations, strategic planning, intelligence, risk assessment, operational support, training, and technical skills. For purposes of consistency throughout this report, the phrase private security company (PSC) will be used.

to improve the command and control relationship between contractors and major subordinate commands (MSC) on the battlefield.

C. RESEARCH QUESTIONS

Through discussions with Naval Postgraduate School professors, contracting professionals and operations officers currently residing in the operating forces, the following questions and sub questions were developed as a basis for this research. The questions are:

1. **Is there a Coordination Problem Between Service Contractors and Supported Units?**

   - If yes, how does this problem affect the supported unit?
   - If yes, is the problem significant enough to warrant a solution?
   - If yes, how can these problems be rectified in a manner that will allow the supported unit to accomplish its tactical mission and allow the contractor to operate efficiently?

2. **Is there a Coordination Problem Between PSC Contractors and the Major Subordinate Commands (MSC) they are Operating Near or With?**

   - If yes, is this a significant (life threatening) issue or merely an annoyance?
   - If yes, what is the historical basis for this problem and what has already been attempted or is currently in place and is it working?
   - If yes, how do we integrate PSCs with military planning without compromising operational security?

When the above questions are answered, the DoD and in particular the acquisition community will be presented with several options for dealing with and coordinating with contractors on the battlefield. By carefully examining and analyzing the answers to theses questions, this project will provide a way ahead in terms of potential doctrine,

regulation and tactical/operational changes aimed at improving and bettering the existing relationship between MSCs and PSCs.

D. METHODOLOGY

This project relied on both primary and secondary research methods to construct an overview of command and control issues concerning civilian contractors on the battlefield.

Primary research consisted of a combination of several techniques. First, interviews were conducted via electronic mail with First Marine Expeditionary Force (I MEF) operations officers, AEGIS Defence Systems contractors and Joint Contracting Command Iraq (JCC-I) personnel currently in Iraq. Second, a sample of contracts was examined. These contracts spanned from October of 2005 to August 2006. Finally, several questionnaires (Appendix I) were developed and targeted three distinct groups; civilian contractors, contracting officers and tactical commanders/operations officers. The results from these interviews and questionnaires provided current, real-world examples of the problems and shortfalls caused by current command and control mechanisms.

Secondary research included reviews of previously awarded contracts, published books, scholarly journals, trade magazines and academic research papers. This research provided historical perspective and an overview of the current command and control functions in OIF.

E. LIMITATIONS AND ASSUMPTIONS

1. Assumptions

As a backdrop, the authors made two general assumptions. Both involve the need for this type of research and future conflicts. The need for contracted support, be it for services or private security, will not be limited to just OIF/OEF. This brand of conflict and the means in which the United States fights it, will be encountered again in

the future thus making this research applicable to discovering a way ahead vice simply looking backwards in an after action-like format. The assumptions for this project are:

a. First, it is of significant importance to the DoD to address these issues because the US will be involved in a similar level of conflict in the future.

b. Second, the US military will continue to rely heavily on contractor support in the future.

2. Limitations

The decision to contract for services and security has become a hotly contested issue within the US Federal Government. This project explores several facets of the overall issue. The size and scope of this issue are such that limitations were set in order to effectively manage data and analysis. The limitations for this project are:

a. First, due to the immense size and scope of the reconstruction efforts that are continuing in Iraq, this project does not include Allied contracting methods and relationships with PSCs.

b. Second, this research and the majority of all data collected focuses on one sector of Iraq currently controlled by the US Marines, Multi National Forces West (MNF-W) region, Al Anbar Province.

This project does not attempt to address the following topics:

a. Whether or not it is appropriate to outsource for services in support of the US Military.

b. Whether or not PSCs should be contracted to operate adjacent to or with in US military forces.

c. Whether or not current methods of contracting were sufficient and effective (LOGCAP, sole source etc...).

F. ORGANIZATION OF THE PROJECT

This project is organized into four chapters. Chapter I provides a short background, identifies research questions and relevant assumptions and limitations. Chapter II presents a historical perspective of the decision to outsource service functions, the command and control structure that is currently used in OIF and command and control problems that have occurred with contractors on the battlefield. Chapter III provides an identification and analysis of problems uncovered during the course of this research. Chapter IV presents recommendations and solutions to five problem areas identified in Chapter III.

THIS PAGE INTENTIONALLY LEFT BLANK

II. CONTRACTOR PLANNING AND INVOLVEMENT: PAST AND PRESENT

A. OVERVIEW

Contractor support for military operations has grown significantly over the last two decades. The tasks performed by contractors have expanded from traditional support roles to critical activities without which many expeditionary operations could not be sustained by military personnel.

The use of contractors to provide support functions is not new to the DoD. In fact, the use of contracting has been resident with American forces since the inception of our country and the military.

This chapter will provide a brief look at the contracting chain of command from both functional and regulatory perspectives, outline the history of outsourcing for services and PSCs, describe problems that have risen as a result of civilians accompanying the force and finally present recent attempts at reform.

B. THE CONTRACTING CHAIN OF COMMAND

In the US military, the chain of command is a simple, highly visible tool for exercising control. Symbols of rank are worn on the uniform so that a person's position in the rank structure is readily apparent. All members of the military receive extensive training on the roles and responsibilities of Officers, Non-Commissioned Officers and Enlisted personnel.

A basic premise is that every military member has an unquestionable place in the chain of command. They know whom they work for and who works for them. The extent of their authority is clearly laid out by the Uniform Code of Military Justice (UCMJ). In combat, commanders are given specific Areas of Responsibility (AOR) they can draw on a map. The commander is responsible for all military matters within that AOR. When this class of society that has such well defined roles and responsibilities is required to blend with contractor personnel, who do not share the same chain of

command, it becomes necessary to define the primary players and their purpose, roles and responsibilities.

1. The Contracting Chain of Command

The contracting community does not share the same neat and orderly chain of command universally accepted by the operational forces of the military. Roles and responsibilities become blurred. Authority may be based more on experience rather than rank.

a. The Commanding Officer

The Commanding Officer is the officer in command of a military unit. Typically, the Commanding Officer has ultimate authority over his assigned forces, and usually has wide latitude to make decisions on the use of those forces. The Commanding Officer is also vested with legal power to enforce discipline and assign punishments within the boundary of military law.

b. Contracting Officers

The Contracting Officer is warranted[2] with the authority to enter into legally binding contracts on behalf of the government of the United States. The Contracting Officer also has the authority to make changes to existing contracts. Contracting Officers, whether they are military or civilian government employees, also fit into the chain of command. In a contingency operation, the contracting officer will typically answer directly to the regional combatant commander.

c. Contracting Officer's Representative

The Contracting Officer's Representative (COR) is a non-warranted individual who has received training in contract administration duties and is assigned

[2] A warrant is an official document designating an individual as a Contracting Officer.

oversight for one or more contracts. Ideally, the Contracting Officer will have enough CORs working for him to assign one to every area receiving contractor support. The COR would provide the interface and communication channel between the contractor and the supported unit. Historically, there have never been enough deployed CORs to make this possible.

d. The Contractor

The contractor is the individual or business that entered into a legally binding arrangement to provide services or goods. Civilian contractors, regardless of to whom they are providing support, are only responsible to the contracting officer. This relationship is established by the Federal Acquisition Regulations (FAR) and the Defense Federal Acquisition Regulations Supplement (DFARS). The FAR specifies that only contracting officers have the authority to enter into, administer, or terminate contracts (FAR 1.602-1). Additionally, the contracting officer has the sole authority to execute modifications to the contract (FAR 43.102).

These two passages of the FAR dictate that all matters concerning the manner in which a contractor executes the terms of the contract must pass through the contracting officer. A consequence of this command relationship is the fact that the local commander has very limited means at his disposal to maintain discipline among contracted employees working in his AOR.

2. Governance of Contractor - Military Relationships

The specific relationship between contractors and the military forces they support has caused much confusion to individuals unfamiliar with contracting law and the FAR. Many military commanders make the false assumption that they have authority over contractor personnel providing support to their unit. In addition to the FAR passages cited above, the following documents provide additional guidance on the relationship between the military and contractors.

a. Uniform Code of Military Justice

The Uniform Code of Military Justice (UCMJ) is codified as part of United States Code, Title 10. The UCMJ is applicable to all members of the United States military forces. The UCMJ is the governing body of law for all matters of discipline within the military forces. It defines the requirements for following lawful orders and specifies punishments for failure to do so.

According to the subchapter 1, section 802 of the UCMJ, in time of declared war, persons serving with or accompanying an armed force in the field are subject to the articles of the UCMJ. This would include civilian contractors providing service support to military forces. The key restriction is this section is only applicable in times of declared war, something that has not occurred since World War II. This section does not apply during contingency operations.

b. Military Extraterritoriality Jurisdiction Act

If a contracted employee commits a felony crime, the Military Extraterritoriality Jurisdiction Act (MEJA) of 2000, 18 USC. 3261 will apply. The MEJA states that DoD contractors may be federally prosecuted for felony-equivalent crimes committed outside of the jurisdiction of the United States.

While the MEJA provides the means to deal with serious crimes committed by contractors, the commander can do very little to correct more minor infractions. Prior to OIF, the US Army provided the following guidance:

> The military commander can indirectly influence the discipline of contractor employees through revocation or suspension of clearances, restriction from installations or facilities, or revocation of exchange privileges.
>
> (Department of the Army, 2000)

The commander that does take these kinds of actions may find he has inadvertently violated the terms of the contract which may result in additional costs to the government. If he removes access to facilities that were promised as part of the contract, the contractor may be able to file a protest and make demands for an equitable adjustment.

c. DoD Instruction 3020.41

Department of Defense Instruction 3020.41, Contractor Personnel Authorized to Accompany the US Armed Forces, provides additional guidance to the commander and clarifies the lack of authority he has to enforce discipline:

> Defense contractors are responsible for ensuring employees perform under the terms of the contract; comply with theater orders, and applicable directives, laws, and regulations; and maintain employee discipline. The contracting officer, or designee, is the liaison between the commander and the defense contractor for directing or controlling contractor performance because commanders have no direct contractual relationship with the defense contractor. However, the ranking military commander may, in emergency situations (e.g., enemy or terrorist actions or natural disaster), direct contingency contractor personnel to take lawful action as long as those actions do not require them to assume inherently governmental responsibilities
>
> (Department of Defense, 2005)

C. CONTRACTING FOR SERVICE SUPPORT

1. History

The practice of using civilian contractors to provide services to the United States military is as old as the US military itself. Since the birth of our armed forces, civilian contractors have provided construction services, tailoring, food preparation, medical care and countless other services. Relying on the private sector to support the needs of the military is not new, only the extent of that reliance on contractor support has varied over time.

The DoD's choice to rely on civilian personnel for services has many economic benefits, but also brings a number of complications. First and foremost of these challenges is the integration of civilian contractors within a rigid military chain of command that is accustomed to having authority over all personnel within their AOR. This lack of control often causes a sense of distrust and concerns about reliability. Conflicts between contractors and military commanders have caused disruptions in services, breaches in security and increased costs to the government.

This challenge has been recognized for some time, but it is difficult to correct. Complaints about the lack of government control over contractors providing support can be traced back almost two hundred years:

> In a letter to Congress in 1818, Secretary of War John C. Calhoun spoke of contractors 'subject to no military responsibility' and upon whom there was no hold other than 'the penalty of a bond.' He went on to assert 'it is often the interest of the contractor to fail at the most critical juncture.
>
> (Dunn, 2005)

While the language is different, a second report from a senior official during Operation Iraqi Freedom expresses almost the same frustration experienced by Secretary Calhoun in 1818:

> A senior U. S. official in Iraq warned his superiors at the Pentagon's program management office in Baghdad that Halliburton senior executives had said they were "considering withdrawing from the country" because of security concerns. The official noted that a cut in LOGCAP services by the firm would cause the "complete collapse of the support infrastructure" of the operation. Halliburton denied it was considering a withdrawal, while the CPA would not comment. Regardless, it underscored how vulnerable military officers felt the operation had become to outside corporate decision-makers.
>
> (Singer, 2004)

Both of these letters cut to the heart of concern that many have in regards to the DoD's heavy reliance on contractor support. Many feel that civilian contractors do not posses the same sense of commitment military forces display. The fear is that contractors will make seemingly arbitrary decision to cease support to the military at a key moment if the threat becomes too high.

In the last ten years, there has been a sharp increase in the amount of reliance on contractors. During Operation Desert Storm, the DoD utilized approximately 9,200 contractors to provide services to the military. Currently in Iraq, there are more than 50,000 contractors employed by Halliburton alone. Independent estimates place the total number of civilian contractors employed by the DoD in Iraq well above 200,000.[3] (Dunn, 2006)

The increase in reliance on contractor support can be traced to a number of reasons. Since the end of the cold war, the number of active duty armed forces has been steadily reduced. While the size of the armed forces may be dictated by Congress, the make-up of those forces is not. This means that the service chiefs, in order to maintain fighting forces, have chosen to eliminate military service support billets. Additionally, force caps mandated by the President of the United States can limit the number of US military personnel that may be used in a given contingency operation. When that cap is reached, contractors can be used to replace soldiers in support fields, freeing more space for combat troops. (GAO, 2003) The increasing cost of maintaining the armed forces makes it economically attractive to outsource services that are only required during contingency operations, so savings can be realized during peace time.

[3] Determining the actual number of contractors employed by the DoD in Iraq has proven to be a significant challenge of its own. GAO investigations have shown that the DoD lacks visibility over the flow of contractors into and out of Iraq. The DoD was ordered to conduct a by-name survey of all contractors in Iraq by June 30, 2006.

2. Essential Services

The reliance on civilian contractors to provide essential services during contingency operations has caused serious concerns. The DoD defines essential services as:

> A service provided by a firm or an individual under contract to the Department of Defense to support vital systems in support of military missions considered of utmost importance to the US mobilization and wartime mission. The services, which shall be designated in the contract, are essential because the DoD components may not have military or DoD civilians to perform these services immediately or the effectiveness of defense systems or operations may be seriously impaired, and interruption is unacceptable when those services are not immediately available.
>
> (Department of Defense, 2005)

The justifiable fear is that contractors may withdraw their support if the environment becomes too threatening, the rigors of contingency operations become too difficult or profit margins begin to narrow. This concern is magnified when the realization is made that nearly all support services provided by contractors operating in Iraq are essential to mission accomplishment.

DoD Instruction 3020.37, Continuation of Essential Services, provides the basis for mitigating the risks of relying on contractors. The instruction directs commanders to identify those services that are essential and take the following action:

> 6.5. Determine prior to contract award, or prior to modification to extend the performance period, whether an interruption of service would result in an unacceptable risk. If an unacceptable risk would result, develop a contingency plan to ensure continued service.
>
> (Department of Defense, 1990)

It is left up to the commander's best judgment to determine what is considered an unacceptable risk. This leaves considerable room for variance in interpretation of this passage. Some commanders may feel it is an acceptable risk to lose electricity while

another commander may feel it is an unacceptable risk to go without hot water for an extended period. Once those areas of unacceptable risk are identified, commanders are further directed to develop their contingency plans to continue those services in the event of contractor default.

A GAO audit conducted in 2003 focused on the handling of contracts in support of operations in Bosnia, Kosovo, Afghanistan and the initial build-up in Iraq. The audit report found:

> …that DoD components have not conducted the directed reviews to identify those contracts providing essential services. Despite requirements established in DoD guidance (Instruction 3020.37), DoD and the services have not identified those contractors that provide mission essential services and where appropriate developed backup plans to ensure that essential contractor-provided services will continue if the contractor for any reason becomes unavailable.
>
> (GAO, 2003)

The GAO report leads the reader to believe that if the DoD follows the guidelines provided in DoD Instruction 3020.37, the risk of contractor default will be eliminated. By following this instruction, the DoD will ensure all contractor services deemed essential will have a redundant support plan in place to fall back on in the event the contractor is unable or refuses to fulfill the terms of the contract. The fallacy of this assumption will be explained in the following section.

3. Service Support Problems

As the use of contractor personnel to replace military service support personnel has increased, more problems have become apparent.

a. Esprit de Corps Versus Profit

In past conflicts, combat troops received direct support from organic military support providers called Combat Service Support (CSS) units, who in turn were supported indirectly by contractors through the supply chain.

The commonality of military service created a shared sense of duty and responsibility between the frontline troops and CSS providers that fostered a sense of trust and accommodation. While they may have been treated as "rear echelon" troops, CSS units still had the common military training that provides a basis of understanding and trust. Additionally, since they are members of the military, when CSS providers operated in his AOR, the local commander retained authority over those troops.

The current use of contractors to provide direct support to combat troops eliminates the commonality and sense of identity shared by members of the armed forces. CSS providers are members of the armed forces, so their focus is on supporting the combat troops in the best way possible. Contractors are businesses, where the primary concern is making a profit. It is often in the contractor's best interest to provide the best possible services to the supported unit, but situations arise where the support required goes above and beyond the scope of their contract, or it may be more cost-effective to provide less than optimal service. This is the area where current policy and doctrine falls short.

b. The Impossibility of DoD Instruction 3020.37

As mentioned in the previous section, DoD Instruction 3020.7 requires commanders to identify essential services provided by contractors and ensure a contingency plan is in place that will ensure continuation of those services. When the current magnitude of reliance on contractor personnel to provide services to deployed personnel is examined, it is the authors' opinion that it is impossible to fulfill the requirements of DoD Instruction 3020.37.

With contractors providing everything from food preparation, to laundry services, to fuel delivery, it is difficult to find a service that is provided by a contractor on

the battlefield that should not be defined as essential. With the reductions in troop manning levels, especially in the combat service support roles, there is not enough military manpower available to provide a redundant backup for all services that could be deemed essential.

Commanders are left with one of two choices: pretend the services provided by contractors are not essential, or ignore the requirement of DoD Instruction 3020.37 to create a plan to continue services in the event contractors are not able or refuse to fulfill the terms of their contract.

4. Command Relationship

The primary issue in this relationship is command and control authority between the tactical commander receiving support and the contractor providing that support. The separation of the contractor from the military chain of command promotes a lack of trust with the forces receiving support. Richard Dunn[4] summed the situation up well when he said:

> Combat support contracts are critical to the needs of the combatant commander and, yet, management and control of contract performance is often vested in officials outside the chain of command of the operational commander or even the theater commander. How can such a system be made to work?
>
> (Dunn, 2005)

Dunn's comment gets to the heart of the concern that many commanders have in regards to contractors. Commanders are accustomed to complete control over all aspects of their unit including care and support. When the majority of the functions that go into that care and support are turned over to a civilian business, that is not required to answer to the commander, mistrust and suspicion are inevitable.

[4] Richard Dunn is a professor at the University of Maryland, College Park, MD.

D. PRIVATE SECURITY COMPANIES

Media coverage and recent events could lead many to believe the use of private security or even hired soldiers is something new to warfare. The facts are that the use of PSCs is as old as warfare itself. Private warriors, often used in different capacities, have for a long time been an integral part of many countries' strategy and foreign policy.

1. History

From as far back as Ancient Egypt and Victorian Britain, outsiders have been hired in one form or another to assist a country in its ability to fight wars. Significant examples of early PSC contracting include ancient Greece and Rome. Greece used outside specialists to build up certain areas of their armies for combat. These specialists were mainly hoplites (infantry) from Syracuse, slingers (archers/artillery) from Crete and Thessalian cavalry.

Roman armies augmented their ranks with foreign archers and cavalry from economically depressed regions of their empire. As the empire matured into the fourth century, Roman armies were often comprised more of Germanic troops than Roman as it became more and more difficult to recruit from within the empire.

The Bible even references contracted or hired armies in the Old Testament in its description of the Israelite's journey out of Egypt. The Pharaoh chased the Israelites out of Egypt with an army that included hired foreigners, while David and his men (when they were on the run from Saul) were employed in the Philistine army of Achish." (Old Testament)

History is replete with accounts of empires and countries acquiring the services of non-state actors to aide in war efforts. Originally, many soldiers hired themselves out as independent free lance specialists. Soon, money and work would run out and soldiers were left with no home or career. As a result, many soldiers formed companies. These early organizations were designed to facilitate employment for the group and at a minimum provide protection. The company would travel together seeking employment in the form of new campaigns to fight and subsist off the land and its people along the

way. Over time these crude start-ups became better organized. Many employed marketing and sales techniques. Agreements or contracts were even employed, at times, with members for things such as length of service, pay and specific duties to be performed. (P.W. Singer, 2003)

2. Modern PSC Foundations

Though taking on many forms and styles over the years, the modern PSC industry is considered to have begun in the early 1990s following the fall of the Soviet Union. Though debated somewhat in the PSC and academic arenas, modern PSC origins are thought to be derived from three separate, but related dynamics of the world at the time.

a. The End of the Cold War

The end of the Cold War brought the illusion of a safer and more peaceful world. As a result, the need for large standing militaries was seen as unnecessary and expensive. In the US, between the years 1985-1999, the Army's troop levels fell from 800,000 to 480,000; cuts were less severe in the other services, but military manpower overall was off by an average of 30 percent. Many of these personnel were highly trained military professionals from elite special operations units who were drawn to the private military/security industry by lucrative salaries and an opportunity to continue to work in an environment where they could continue to utilize their military skills.

Unfortunately, the overly optimistic outlook on world events did not unfold as many had hoped. For US forces, smaller scale operations in Somalia, Haiti, Cuba, Bosnia, Kosovo and the ever-present threat posed by Saddam Hussein's Iraq caused many of the leaned out forces to see their operational tempo increase in this supposedly safer world. The combination of smaller force levels and increased operational tempos opened the door for PSCs to step in and fill the gap with their specific skill set so desperately needed. (Avant, 2006)

In Eastern Europe alone, the largest employer of trained military professionals in the world, the Soviet Union, began 'laying people off' by the hundreds of

thousands effectively flooding the market with unemployed soldiers. To compound the issue, the implosion of the entire Baltic region and states such as Yugoslavia and Czechoslovakia created border unrest and set conditions ripe for future conflicts. (P. W. Singer, 2003)

Robert Mandel points out the effect that Cold War cessations had on the availability, shipment and possession of small arms across the world. In his book, Armies Without States, Mandel states that national governments still maintain the advantage of fire power and the exacting sciences associated with it by continuing to posses the larger surface to surface and air to surface weapons. They are, however, in the minority when it comes to the types of small arms used in low intensity conflicts indicative of a post superpower world. The cross-border clandestine transfer of light weapons seen in the 1980s retained its momentum in the 1990s with the excess capacity in arms production combined with the greater visibility of internal state turmoil fostering intensified competition by arms produces to enter foreign markets. The result was PSCs now had access to former military weaponry perfectly designed to outfit their former military employees who filled their ranks. (Mandel, 2002)

For recently unemployed professional soldier, options for employment dwindled. With no state sponsored military to provide for the individual, the natural draw was to privately financed, equipped, owned and operated military firms who the demand for was on the rise.

b. Transitions in Warfare

Transformation in the nature of war had taken place. This transformation blurred the lines between soldiers and civilians. Military power in many countries had moved from the hands of the state to the private market and away from government oversight and management. After the Vietnam War, American weapon inventories were increasingly stocked with high tech, sophisticated systems. The gravitation towards these weapons slowly shifted a large power base from the military to the PSC, because, now

the military was increasingly relying upon contracted technical support for training, maintenance and operation. (Avant, 2006)

The use of information technology has also drastically changed the nature of war. Private companies and civilians have become better able to take advantage of the rapidly changing technological environment to wage an information campaign on potential adversaries. (P. W. Singer, 2003)

c. Privatization of Governmental Activities

Finally, many governments succumbed to an ideological trend toward privatization of many of their functions. Many former state responsibilities—including education, policing, and the operation of prisons—were turned over to the marketplace. (P. W. Singer, 2003)

Central governments and their ability and/or desire to effectively manage their own countries lead to this form of arm's length governance. Instead of investing capital to bolster from the inside out, these governments placed the control of their own state in the hands of non-state actors. As noted above, functions such as law enforcement, corrections and education are, from the American perspective, governmental functions to be managed and overseen for the greater good of the nation. Office of Management and Budget (OMB) circular A76 outlines the policies and procedures that executive branch agencies must use in identifying commercial-type activities and determining whether these activities are best provided by the private sector, by government employees, or by another agency through a fee-for-service agreement. (OMB, 2003) With little to no legislation and few historical examples to draw from, many fledgling or former Soviet Union satellite countries simply outsourced their country's most basic functions including defense and security.

The experience of the former Soviet Union has been repeated on a smaller scale in the United States. The post-cold war draw down of forces in the United States also left many experienced military forces without employment. This exodus of trained soldiers gave rise to many of the American based PSCs such as Blackwater.

The results of just one of the above three elements alone did not lead to the modern PSC. Rather, in a sum total effect, the modern PSC was born more or less out of fortunate timing. Excess supplies of personnel, weapons, and equipment coupled with dynamic changes in how states managed domestic and foreign affairs lead to set the conditions from which PSCs could operate and function as stand alone entities.

3. PSC Usage by Other Countries

The use of PSCs has become so pervasive and the market in such demand, there seems to be no place on the planet not within reach of their services. From third world countries in Africa and New Guinea to modern battlefields of the Balkans and the Middle East, PSCs have arrived with a seemingly endless kit bag of weapons, tactics and personnel.

a. PSCs Actively Wage War

Executive Outcomes was a South African PSC made up mostly of the disbanded South African elite and battle tested 32nd Battalion. Known as the 'Terrible Ones', the 32nd Battalion turned private and became the world renowned, though controversial, Executive Outcomes. Brandishing former Soviet hardware such as Mi 17 and Mi-24 Hind E attack helicopters and BMP-2 armored personnel carriers, Executive Outcomes provided the potential buyer with the fire power rivaling that of most third world countries. (Francis, 1999)

In March of 1995 the small African country of Sierra Leone gave the world its first real exposure to the modern PSC and its wide range of capabilities. In April of 1995, the government of Sierra Leone failed to defeat the local rebel faction calling itself the Revolutionary United Front (RUF). With time running out and RUF forces rapidly closing in on the Sierra Leone Capital of Freetown, the government turned to the private market for assistance. Executive Outcomes, having just accomplished a dramatic but understated 'victory' in Angola, agreed to provide its full range of services

to Sierra Leone in exchange for over $1.2 million per month salary and mining concessions in Sierra Leone's lucrative diamond fields.

Their forces began to arrive in Sierra Leone within one month's time with plans to implement a three phase operation to take back the country. Phase I included the eviction of RUF forces from the peripheral districts of Freetown. Phase II incorporated securing lucrative diamond mines and finally phase III entailed destruction of RUF headquarters Through the use of artillery, fixed and rotary wing close air support and mechanized infantry attacks, Executive Outcomes took just nine days to drive the RUF back into the jungles and another two days to retake the lucrative diamond fields. (Francis, 1999)

Examples such as this and others involving PSCs actively hiring themselves out for offensive combat operations demonstrate the lengths to which many firms will go to fill the demand now levied on the PSC market. Executive Outcomes was eventually forced to dissolve only to re-surface under a different name, but essentially the same leadership. As long as a demand for combat operations exists, there will be firms willing to fill that demand. Executive Outcomes, is just one of many willing to do so.

b. PSCs as Consultants

Military Professional Resources Incorporated (MPRI) provides yet another example of how PSCs have changed the scope of a country's approach to waging war. MPRI is an American based consultant firm founded in 1987 and located in Alexandria, VA, just a few short minutes from the Pentagon. Staffed by many retired American general and flag officers, MPRI has maintained a close relationship with the DoD and American foreign policy.

In 1994-1995 MPRI was hired by the Croatian Ministry of Defense on two separate contracts. The first was designed to provide the Croatian Ministry of Defense with long term strategic capabilities and the second to implement what came to be known as a Democratic Transition Assistance Program (DTAP). The underlying premise for MPRI's involvement in Croatia was to transform the Croatian army into a modern North

Atlantic Treaty Organization (NATO) style force. In August of 1995, Croatian forces launched an offensive that, if presented to the NATO staff college in North America or Western Europe, would have "scored an A plus." (P. W. Singer, 2003)

Not long after the closure of their Croatian contract, MPRI bid for and was awarded a $50 million contract with neighboring Bosnia for a 'train and equip' mission. Their intent in the region was to provide the Bosnian military with enough combat training and guidance to ensure a stabilized force that would prevent future acts of aggression from the Serbs. (P. W. Singer, 2003) As a result, MPRI would remain imbedded in the region for years to come.

It is important to understand the significance of the American based firm MPRI. Far from the shores of Africa or the chaotic and turbulent governments in the South Pacific and Middle East, MPRI firmly stands its ground in the PSC market place less than a mile from the Pentagon. American involvement in this market is significant. MPRI vehemently rejects accusations that their actions contradict US foreign policy. Lynch, 1997) MPRI's mere presence in the market, however, demonstrates that one need not go too far from the pinnacles of democracy and freedom to find PSCs operating profitably and legally.

3. The DoD and PSCs

The DoD is not a new customer to the PSC industry. Like countries all over the world, American dependence on contractors has increased dramatically over the past 10 years. Among some of the more prominent PSCs found in support of US forces are Blackwater and AEGIS Defence. Though the following is only a small sample of PSC currently on the market it demonstrates the depth of contractor involvement on America's modern battlefields.

a. Blackwater USA

Without question the best known of all PSCs is Myock, NC based Blackwater USA. Blackwater was founded in 1987 by former US Navy Seal, Eric

Prince. While serving primarily as a security provider in the continental US, Blackwater's portfolio expanded rapidly following the events of September 11, 2001. Consisting mostly of former US Special Operations Command members, Blackwater quickly earned the reputation as the most professional and aggressive PSC in the industry.

In 2003, Blackwater was awarded a $21 million security contract to provide private security details for CPA employees, including the US administrator, L. Paul Bremer, and other VIPs visiting Iraq. On March 31, 2004 Blackwater became a household name when four of its employees were killed while escorting vehicles dispatched to pick up kitchen supplies near Fallujah. In the ensuing civil unrest, two of the four bodies were hung from a local bridge after being mutilated and burned beyond recognition. (Mangini, 2005)

b. AEGIS Defence Services

The British security firm AEGIS is led and inspired by Mr. Tim Spicer. A twenty year veteran of the British Army, former Scots Guard officer, Sandhurst graduate and a veteran of the Falkland's War, conflicts in Northern Ireland and Bosnia. In May of 2004 AEGIS competitively bid for and was subsequently awarded a contract requiring the firm to stand up and maintain an operations center in support of the reconstruction phase in Iraq. The contract specified two general requirements. First, AEGIS was to establish and maintain the reconstruction operations center (ROC), a turn key solution designed to provide oversight, de-confliction and battlespace management for the thousands of contractors and military personnel operating in Iraq and often right next to each other. Second, AEGIS was to provide security teams for designated US government members in Iraq. This more traditional personal security detachment would provide safe passage to all Project and Contracting Office (PCO) and ROC personnel while executing their reconstruction duties. (Mangini, 2005) AEGIS's role as a US contracted PSC will be discussed in greater detail later in chapter three of this report.

c. DynCorp

From law enforcement operations on the US-Mexican border and in post conflict Iraq to counter drug operations in Columbia, the US Government's reliance on Dyncorp has been one of the better kept secrets in the PSC industry. The Reston, VA based contractor provides more than the typical PSC-like services. Its heavily armed security details and security consultants provide excellent examples of American use of PSCs. In Iraq, DynCorp's employees routinely escort US Department of State employees throughout the country. As outlined by the corporate watch dog group CorpWatch:

> The US State Department awarded DynCorp a multimillion-dollar contract to advise the Iraqi government on setting up effective law enforcement, judicial and correctional agencies. DynCorp will arrange for up to 1,000 US civilian law enforcement experts to travel to Iraq to help locals "assess threats to public order" and mentor personnel at the municipal, provincial and national levels.
>
> Already armed DynCorp employees make up the core of the police force in Bosnia. DynCorp troops protect Afghan president Hamid Karzai, while DynCorp planes and pilots fly the defoliation missions over the coca crops in Colombia. Back home in the United States Dyncorp is in charge of the border posts between the US and Mexico, many of the Pentagon's weapons-testing ranges and the entire Air Force One fleet of presidential planes and helicopters. The company also reviews security clearance applications of military and civilian personnel for the Navy.
>
> (CorpWatch, 2005)

The depth and breadth of the services provided by PSCs to the federal government is staggering and often misunderstood. As shown by these three examples above, Blackwater, AEGIS and DynCorp, the American use of PSCs is well documented and ingrained in almost every aspect of not just foreign policy, but domestic policy as well.

E. PSCS ACCOMPANYING THE FORCE

The DoD must consider the negative externalities associated with outsourcing. The following list is not all encompassing, but will briefly discuss three main concerns with outsourcing. First, combat and combat operations support is to be taken up by uniformed personnel. The modern battlefield has changed such that contractors are increasingly being caught in compromising positions and in many cases losing their lives because of it. Second, outsourcing requires a great deal of oversight to preclude opportunistic behavior. The US government is not in a position to provide such extensive oversight at this time. Third, in combat operations command and control are vital to mission success and the security of the force. Inside the US military, this is a mantra taught to officers from day one of officer training, but not the case with a civilian run organization.

1. PSCs in Unsupportable Positions

On the non-linear battlefields of the modern way of warfare, every participant has the potential to be targeted on the frontline. Contractors are no exception. Without proper coordination and communication, contractors assume risks exceeding that of normal military units. They stand out from both soldiers and locals by what they wear, what they drive, what they look like and how they act. They are easily identified and targeted. (Mangini, 2005)

In April of 2004, a New York Times article by, Dana Priest, wrote the following regarding the isolation many private security contractors deal with and the sometimes deadly results:

> While US and coalition military forces fought rebellions in a half-dozen cities yesterday, the body of a contract worker, employed to guard the power lines of the Iraqi ministry of electricity, was extracted from a rooftop in Kut by his firm's Iraqi interpreter after he bled to death, according to government and industry officials. The dead man, a Western employee of London-based Hart Group Ltd., had been pinned down on the

> rooftop of the house he and four colleagues had been occupying Tuesday night when insurgents overran the house. The other four were wounded. "We were holding out, hoping to get direct military support that never came," said Nick Edmunds, Iraq coordinator for Hart, whose employees were operating in an area under Ukrainian military control. Other sources said Hart employees called US and Ukrainian military forces so many times during the siege that the battery on their mobile phone ran out.
>
> (Priest, 2004)

The incident clearly displays the types of situations contractors are increasingly encountering. The responsibility of ensuring the safety of employees rests solely in the hands of the PSC firm. Contrary to what Priest advocates above, it is not the military's job to respond to every '911' like call for help.

What is also very telling about the incident above is the fact that the PSC employees were inside of a non-American sector of Iraq. The challenges surrounding PSC management and command and control involve more than just Americans. In areas controlled by allied forces, problems (communications equipment, lack of common terminology etc) associated with PSCs become amplified and even more difficult to solve.

2. Oversight and Accountability

PSCs are not tracked and controlled by any single organization inside the DoD. Since the PSC industry is inherently complex and difficult to evaluate, a robust monitoring and surveillance plan would be necessary. For example, the Defense Contract Management Agency (DCMA), the Federal Government's lead agent for matters such as this, would be required to drastically increase its capacity to handle this increased load. This would be a considerable effort since DCMA has suffered massive downsizing over recent years. Since 1990, the agency has cut its workforce from 25,000 to 11,500 employees and saw the number of those eligible for retirement increase to over 50% by the year 2005. (Cahlink, 2005)

3. Command and Control

As the proliferation of PSCs in Iraq reaches a fever pitch, and US involvement becomes more hotly contested at home and abroad, the issue of command and control becomes more critical. The inherent lack of coordination and communication between PSCs and local military commanders resulted in the deaths of hundreds of civilian contractors, forced local commanders into undesirable tactical positions and provided a face to the American occupation that most military commander would rather not show.

Regardless of the fact that PSCs are not part of the military, they do represent the DoD, and their actions. Even their presence represents the American war machine and US foreign policy. In Iraq, formal rules of engagement and support of the bigger picture do not apply to PSCs. Their purpose is to support their employer. Their actions on the roads and in the cities of Iraq have been described as cowboy-like by those who have seen their work. (Mangini, 2005) PSCs are not required to coordinate with adjacent military commanders on the ground.

Proof of success in coordinating unit activity does exist. According to a former Marine Corps Operations Officer in Iraq's Al Anbar Province, military convoys within a battlespace were conducted regularly with little to no incident. Coordination between adjacent units was required for mission success and done on a routine basis. The same could not be said for PSC escorted convoys. Often, the presence of a PSC security detail was announced by explosions, gun shots and frantic calls for assistance. As a result, the local commander was required to commit a sizable portion of his already thin force to assist the unannounced guests, often times taking fire from the very persons they were rescuing. (Styskal, 2006)

Dr. Pete Singer had this to say regarding command and control of PSCs and the fundamental and inherent risks inside of a battlespace:

> Unity of command may be a fundamental concept, but in Iraq, it is already lost. Officers must worry about armed forces operating within their sector of responsibility but outside the bounds of their authority. Many of these contractors work directly for the CPA, which coordinates and

> communicates only on a limited basis with the normal US military chain of command. Others work for entities other than the CPA, such as construction firms and media companies. Thus, local military commanders are often unaware of the daily actions of firms in their zones of responsibility. This disconnect is not just a simple point of discomfort for officers. "Friendly fire" incidents have even broken out between contractor and coalition convoys.
>
> (P. W. Singer, 2005)

Both Styskal's and Singer's comments strike at the heart of the PSC command and control issue and will be discussed in further detail later in this paper. PSCs that operate autonomously and without regard to other battlefield entities are a danger to themselves, their clients and every adjacent military unit.

F. PREVIOUS REFORM EFFORTS

Research conducted by Maj. Karen Douglas identified the commander's lack of emergency control authority as a major weakness in acquisition policy and recommended a change be made to the DFARS to grant this authority.(Douglas, 2004) This recommendation was reviewed by the DoD and Congress and subsequently rejected. (Merriman, 2006)

Department of Defense Instruction 3020.41, Contractor Personnel Authorized to Accompany the US Armed Forces, was issued in October, 2005 to address many issues surrounding contractor support in Iraq and Afghanistan. On the topic of emergency authority, the instruction states:

> Defense contractors are responsible for ensuring employees perform under the terms of the contract; comply with theater orders, and applicable directives, laws, and regulations; and maintain employee discipline. The contracting officer, or designee, is the liaison between the commander and the defense contractor for directing or controlling contractor performance because commanders have no direct contractual relationship with the defense contractor. However, the ranking military commander may, in emergency situations (e.g., enemy or terrorist actions or natural disaster), direct contingency contractor personnel to take lawful action as long as

> those actions do not require them to assume inherently governmental responsibilities
>
> (Department of Defense, 2005).

Granting emergency control authority to the local commander is a good first step toward formalizing the relationship between the contractor and the supported unit. It does not, however, address the majority of command issues faced by commanders. Emergency control authority does nothing to address the more mundane control issues that arise on a daily basis and are compounded by the lack of communication between commanders and the contracting officer. Emergency authority essentially gives the commander the authority to tell the contractors where to take cover during an attack and nothing else. The commander is prohibited from using the contractors to augment his defense by article 13 of the Hague Convention and article 4 of the Geneva Conventions which both establish that contractors would become illegal combatants if they were to take an active role in combat operations.

In an attempt to centralize control of PSC activities, coalition forces established the Reconstruction Operations Center (ROC). The ROC provides a centralized node for command and control for PSC representatives operating in Iraq. Similar to high level US military combat operations centers, the ROC's goal is to provide enemy and coalition situations, intelligence updates as well as any recent political events deemed relevant to PSC operations. Participation in the ROC, however, is not required either legally or contractually. (Mangini, 2005)

In response to the March 2004 killings of the four Blackwater employees, Coalition Provisional Authority memorandum 17 (CPA 17) was issued in June of 2004 and signed by then CPA administrator, Paul Bremer. The intent behind the memorandum was well founded. It set out to standardize the manner in which PSC providers are registered, regulated and vetted. The memorandum provides specific guidance on the use of force, weapons safety and the code of conduct expected of PSC providers in Iraq. (Bremer, 2004) Though published and put into writing, many within the industry do not recognize CPA 17 as an effective tool to bring order to this industry.

G. CONCLUSION

> The essence of contract law, as it emerged in its modern form in the 19th Century, was freedom of contract; and the very definition of a contract was that of legally enforceable promises. In contracting, individuals (on behalf of themselves or the organizations they represent) freely make promises in a manner that creates legal obligations—creates law—between them. This creates a relationship among the people affected by the contract, particularly in service contracting. Inter-personal relationships and the identification of a community of interest may play a key role in the successful management and control of contract performance in contingency operations.
>
> (Dunn, 2005)

One of the reasons private sector contractors can be efficient and profitable is the freedom from a rigid command and control structure. Forcing restrictions onto these companies may destroy the economic benefits gained from outsourcing services and in effect drive away competition as PSCs will seek other employers who do not impose the same restrictions. The argument has also been made that there is no need to alter current policy because the flow of services has continued unabated despite minor setbacks. (Dunn, 2006)

Two hundred and thirty one years of US military history have firmly established the fact that contracting service support is a mixed blessing. It allows military commanders to focus their efforts on warfighting functions and leverages the economic benefits of private-sector businesses. It also creates a complicated command and control situation, increases potential for service disruptions and puts critical support services under the control of civilians.

Military traditionalists might advocate the elimination of reliance on contractors by increasing organic service capability. This is not a realistic option in the era of reduced forces and the need to create efficiencies under the Government Performance Results Act. The days of maintaining a large force structure to support seldom used functions are

over. Contractor support is now a fact of military operations. The DoD is engaging in a successful effort to adapt warfighting strategies to the asymmetric battlefield. It is now time for the DoD to extend that adaptation to its policies on the command and control of civilian contractors on the battlefield.

THIS PAGE INTENTIONALLY LEFT BLANK

III. IDENTIFICATION AND ANALYSIS OF PROBLEMS

A. OVERVIEW

> War is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty. . . . The commander must work in a medium which his eyes cannot see; which his best deductive powers cannot always fathom; and with which, because of constant changes, he can rarely become familiar.
>
> (MCDP 6)

Since the initial invasion of Iraq in March of 2003, the private security industry's relationship with the military has gone through highs and lows. There have been countless times when PSC operations have integrated flawlessly with military operations. There have also been numerous occasions when the relationship has been almost adversarial, with both sides refusing to communicate or coordinate with the other.

This tenuous relationship has been brought to the forefront by situations such as one that occurred in May of 2005. A convoy of technical personnel from the American based firm Zapata Engineering escorted by a PSC was transiting through the dangerous streets of Fallujah. After repairing a flat tire on one of their sport utility vehicles, their convoy was stopped by a Marine patrol and questioned regarding an incident involving a nearby Marine observation post. When asked if the convoy had fired on the nearby Marine guard tower, the convoy's commander denied involvement. Unconvinced, the Marine Officer on the scene ordered the 16 American security guards and three Iraqi maintenance workers into custody. Three days later, all 19 in custody were released, but not without significant backlash from their family members in the United States, many of whom have since hired attorneys in preparation for legal suits. (Phinney, 2005)

Could this incident and others like this in Iraq, have been prevented or at least mitigated? Did Zapata know where the Marine guard towers were? Did the Marines know there was a contractor convoy transiting though their battlespace that day?

According to the National Defense Authorization Act fiscal year 2005, US military forces have no command and control relationship over private security contractors working in Iraq. (GAO, 2005) With no defined control relationship in such a

dangerous environment, problems have risen regarding who is in charge of whom and ultimately who gives way to whom inside an actively managed battlespace.

Coordination between the military and PSCs has evolved greatly since the beginning of the stability and reconstruction phase in Iraq. Initially, informal means were used to pass information and coordinate movements. Examples range from face-to-face discussions in mess halls on board US installations to actual briefs in unit operations centers. According to several US Army officers and PSCs interviewed by GAO, the results and techniques were inconsistent and often depended on the personalities of those involved in the discussion. According to several Marine Operations Officers interviewed, PSC presence in their battlespace was often not known until they were observed by patrols or calls for help were received.

In more extreme cases cited by other Marine officers, PSC escorted convoys would travel unannounced through a military unit's AOR and come under attack by insurgent forces or fall victim to an improvised explosive device (IED). In one case, the contractor's convoy split from the lead half leaving the damaged tail elements behind. The result was that one of the civilian drivers was abducted by insurgents. This incident caused the Marine unit to cease all current and planned operations, provide a quick reaction force, set up vehicle checkpoints and sweep the surrounding areas to look for the driver who, incidentally, was never found. The same contractor convoy, this time escorted by Marine Corps forces, received contact on the way back to the base. Without positive identification of targets the civilian security personnel returned fire back in the general direction of their attackers and actually shot a coalition outpost wounding several civilians. (Bitanga, 2006)

> No single activity in war is more important than command and control. Command and control by itself will not drive home a single attack against an enemy force. It will not destroy a single enemy target. It will not effect a single emergency re-supply. Yet none of these essential warfighting activities, or any others, would be possible without effective command and control. Without command and control, campaigns, battles and organized engagements are impossible, military units degenerate into mobs and subordination of military forces to policy is replaced by random

> violence. In short, command and control is essential to all military operations and activities.
>
> (MCDP 6)

Though MCDP 6 speaks specifically about military operations, these principles can and should be applied to any large scale operation that requires the coordinated efforts of multiple agencies. At layers deep beneath the surface of the large scale reconstruction efforts, over 60 private security companies are operating in Iraq. Many of these PSCs operate without coordination and with little regard for adjacent units or reconstruction efforts overall. This chapter will identify and analyze several factors that contribute to the overall command and control problems of contractors on the battlefield.

B. ANALYSIS

1. Background

During December of 2003, selected members of the US Army Corps of Engineers (USACE), Project and Contracting Office (PCO) and the Iraqi Ministry developed a comprehensive list of projects designed to get Iraq back on its feet following initial combat operations. In January of 2004, the US Congress approved this project list, and authorized and appropriated $18.4B towards its end. Reconstruction was officially underway. (Schweitzer, 2006)

The principle agency charged with the management of the $18.4B in reconstruction funds was the PCO. According to the PCO's website, their stated mission is, "To serve the people of the United States and Iraq by contracting for and delivering services, supplies, and infrastructure identified within the Iraqi Relief and Reconstruction Fund, a total $18.4 billion in resources allocated by the US Congress on behalf of the American taxpayers for rebuilding Iraq." In short, the PCO took the lead in rebuilding Iraq.

During the initial stages of reconstruction, civil/military operations experienced a relative calm throughout the country. Only limited and sporadic fighting occurred from time to time in and around areas predominantly loyal to Saddam. As reconstruction

contracts were let and the $18.4B began to fund contracts, private contractors began work all over Iraq. With time, the insurgency gathered strength and began exploiting the relatively unprotected convoys and job sites of contracted firms. Coalition forces were stretched thin focusing on their own force protection, and had little time or personnel to devote to protecting civilians on the battlefield. (Bush, 2006)

2. Actions at the Sub-Contractor Level

Problems involving PSCs by and large are found within the maze of sub-contracts trickling down from each prime contractor. In the ensuing gold rush-like dash to begin and maintain reconstruction, prime contractors were awarded contracts with very little oversight or concern on the part of the federal government regarding sub-contracting plans.

a. Core Competencies

Though the prime contractor was overall responsible for executing the sometimes un-definitized contract awarded, sub-contractors often performed work not associated with the prime contractor's core competency. In a May 1990 Harvard Business Review, Prahalad and Hamel declare that a company's competitiveness is a result of its core competencies and its core products. According to them,

> [c]ore competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies.

Core competencies are, in Prahalad and Hamel's opinion, a company's critical resource and should be the focus for its strategy at corporate level (Prahalad and Hamel, 1990).

With private security being a non-core competency for many contractors, prime contractors and sub-contractors hired an array of PSCs to protect company personnel, job sites and equipment. Many times this was done without first consulting

with the contracting officer. The lines of authority and control blurred as contract actions extended deeper into multiple tiers of sub-contracts and further away from prime contractor and contracting officer control. The result was that PSCs were being contracted without the knowledge or approval of a government contracting officer. With no way of enforcing the requirement for prime contractors to report sub-contracting actions or changes, the prolific hiring of and uncoordinated actions of PSCs was well underway.

b. Lack of Transparency Noted by GAO

A 2005 GAO report identified a lack of oversight when it analyzed the tracking and accounting of costs associated with PSCs by contracting agencies and prime contractors. Though specifically focused on cost accounting and specific cost elements, GAO found a general lack of interest by prime contractors involving sub-contracted actions that did not significantly affect project schedule or cost. GAO concluded that reconstruction contractors did not always specifically track security related costs or the actions of PSCs by their sub-contractors or lower tier suppliers. (GAO, 2005)

c. Contract Language

As the contracting environment evolved and the theater matured, so too did efforts to address issues surrounding the actions of sub-contractors in the language of contracts. In a sample of contracts awarded by the PCO via the Joint Contracting Command Iraq (JCC-I)[5] the following language could be found in section C, Statement of Work:

> Contractor shall provide security for all work. This includes all costs associated with protection of contractor and US Government employees from the actions of terrorists and criminals. Protection of base camps, protection of workers at all of job sites, security escort to facilitate

[5] Joint Contracting Command Iraq (JCC-I) was stood up in 2005 with the intended purpose to provide strategic and operational level coordination and direction to the contracting efforts throughout Iraq

> movement of personnel and equipment, hardening of facilities, procurement of hardened vehicles and procurement of protective gear, following PCO Security Directorate recommendations to, and discussion with, the contractor's Security Manager, are included. Offerors are to be aware of the special security situation in Fallujah, and are to identify and include for any special badging and identification requirements necessary for entry to the area. Note that the United States Marine Corps operate throughout the city of Fallujah. During the performance of the contract, close coordination of vehicle movements and other activities in areas associated with this scope of work MUST be coordinated through the USACE Resident Office with the responsible military unit. Besides personnel badging, other requirements may include detailed instructions for vehicle speeds, signaling, documentation, and operating times.
>
> (JCC-I, 2005)

Section H, Special Contract Requirements, of the same contract, addresses the issue of security slightly different from what is seen above. Here, the contracting officer's language addresses the need for contractors to report any contractor personnel who carry weapons and that this clause shall flow down to all tiers of the contract:

> Contractor personnel are required to obtain approval from the Contracting Officer prior to carrying or possessing weapons within the borders of Iraq for any purpose. These requirements do not apply to the shipment of ammunition or weapons contained in the original factory shipping containers. This policy applies to all levels of subcontracted personnel and this clause shall be included in all subcontracts issued for work performed within Iraq.
>
> (JCC-I, 2006)

Both of the above passages outline JCC-I's efforts to ensure three things. First, the contracting officer is made aware of any and all actions of PSCs at the sub-contractor level. Second, these clauses effectively flow down from the prime to all sub-contractors. Finally, it is imperative for the contractor to seek out and coordinate with agents of the USACE, PCO and the local military commander. This language puts the prime contactor firmly responsible for PSC actions at all tiers, however, it does so in the

form of a term or condition written for these particular contracts from this particular contracting agency.

In other contracts awarded by JCC-I as early as October and November of 2005 and as recently as July 2006, security is addressed via a contract line item (CLIN) or when referencing the scope of work to be performed by stating:

> The Contractor shall provide all necessary security to successfully deliver the [ET-015 CPS 132kV SUBSTATIONS…][6]
>
> (JCC-I, 2005)

d. Contract Trends

Of the contracts sampled spanning the period July 2005 to September 2006 several trends were noted. First, language and verbiage related to security dramatically increased over the period sampled. The elevation of threats and insurgent activity certainly explain this. Second, each mention of the contractor's responsibility relating to security was done so in varying levels of detail, remained random and lacked standardized language or location within the contract itself.

The visibility of actions at the subcontract level is greatly reduced and often times ignored as a result of extensive and complex sub-contracting plans. The lack of transparency has allowed sub-contractors to operate without proper coordination. Currently there is no mechanism for the contracting community as a whole to convey a standardized, contractual requirement regarding security, PSC management and coordination at the sub-contracting level. Without a standardized method, contracting officers and contracting agencies are left to address coordination issues on their own.

---

[6] The language before the section [ET-015 CPS 132kV SUBSTATIONS…] is routinely copied into JCC-I contracts.

3. Lack of Pre-Existing Doctrine for Command and Control

As incidents of blue on white[7] rose, the following questions began to surface: Who would coordinate movements of the large volume of PSCs in Iraq with other reconstruction efforts? How would ongoing offensive operations of coalition forces be affected by PSCs moving throughout Iraqi battlespace?

OIF was and remains unique. Following what was thought to be the cessation of offensive operations on May 1, 2003, the United States set into motion its plan to rebuild Iraq. Though the intent was clear, the mechanisms to take on such a hefty task were not. Doctrine did not provide any answers to a reconstruction problem as large and complex as postwar Iraq. According to Colonel (Ret) Joseph Schweitzer,[8] the compiling and prioritizing of reconstruction projects did not even begin until December of 2003 and was not confirmed by Congress until January 2004. There simply was no doctrine or precedence from which to begin planning and executing an operation of this magnitude. (Schweitzer, 2006)

The lack of a solid plan for reconstruction operations resulted in the DoD and Department of State awarding thousands of contracts for various services in a very short period of time with very little oversight. During 2004, hundreds of thousands of contractor personnel flowed into Iraq and Kuwait with little control. This huge influx of contractors created an enormous burden on the DoD as it tried to keep track of these contractors and deconflict their actions with military forces.

By May of 2004, the USACE, Gulf Region Division (GRD) and the PCO identified requirements for a centralized system of command and control capable of tracking and accounting for contactors and their efforts in Iraq. With no pre-existing doctrine on contractor coordination or contracting support plans to fall back on and with time being of the essence, the USACE and the PCO turned to the private marketplace to

[7] Phrase used to describe battlefield engagements between coalition military forces (Blue) and PSCs (white). (GAO, 2005)

[8] Colonel (Ret) Joseph Schweitzer, US Army. Former Deputy G3 Operations Officer, Headquarters, US Army Corps of Engineers, Washington, D.C.

fill the command and control void. In the PCO's request for proposal released in May of 2004, the statement of work laid out for potential offerors identified the following:

> The Contractor shall provide all planning, mobilization and start-up for a comprehensive security management team that provides security program management, anti-terrorism support and analyses, movement/escort security and close personal protection. The contractor will provide security advisors and planners to facilitate, coordinate and implement security requirements and contingency plans. The contractor will be required to coordinate with local authorities (Coalition Provisional Authority, local police, other country police forces and US and other country military force) and plan route selection and sufficient coverage for the safe movement of personnel (Statement of Work reconstruction security support services'
>
> (AEGIS, 2005)

Throughout 2004, the command and control of PSCs and all reconstruction efforts remained fluid. With no pre-existing doctrine or prior experience to draw from, the command and control of PSCs developed as a result of reactive measures taken to bring reconstruction under control.

4. Coordination, Command and Control of PSCs on the Battlefield

> Done well, command and control helps commanders make the most of what they have: people, information, material and often most important of all, time.
>
> (MCDP 6)

a. Blue on White Incidents

As mentioned earlier, one important issue that contractors and the military are concerned with is blue on white violence. Blue on white incidents occur when either military forces fire upon contractors or when contractors fire upon military forces. The GAO reports that these types of incidents display a significant lack of coordination between PSCs and the military. Analysis conducted by the GAO in 2005 and again in

2006 show the number of blue on white incidents decreasing, but still remaining at a level of concern. During a five month period from January to May 2005, twenty blue on white incidents were reported. In another sample, this time of twelve months, the GAO found twelve incidents that were reported. As noted by the GAO the actual number of incidents is difficult to know since many are simply dismissed as part of the job and not reported by PSCs. (GAO, 2006)

Conclusions from the GAO's analysis are straightforward. Clashes between PSCs and military forces are happening all over Iraq. Though the numbers seem insignificant and appear to be declining, there remains work to be done in the areas of coordination, command and control.

b. Organizational Structure of the National ROC

As noted by the GAO, on a daily basis in Iraq, a major shortfall of the reconstruction effort was command and control. To best provide the level of coordination, command and control for the reconstruction efforts, the PCO and USACE officers designed a model based on a military operations center and formed around two separate tiers of operation; the first at the national level with the second at regional levels in direct support of reconstruction and military efforts.

The National ROC (NROC), located in the heart of Baghdad's international zone, is set up and run very much like a military operations center. Inside the NROC, as seen in Figure 1, a staff manned with personnel from each staff functional area[9], including PSCs and the military liaisons, work to coordinate the efforts of contractors in support of the overall reconstruction effort. (Schweitzer, 2006)

Figure 1 shows the breakout and functional areas of the NROC. The NROC, even though manned and staffed by approximately 80% AEGIS contractors, resembles the high level staff of any American military component. Of particular importance is the C-5 LNO or liaison officer functional area. PSC liaisons provide the

link between the NROC, all participating agencies and the PSC units at the lower tiers in the field.

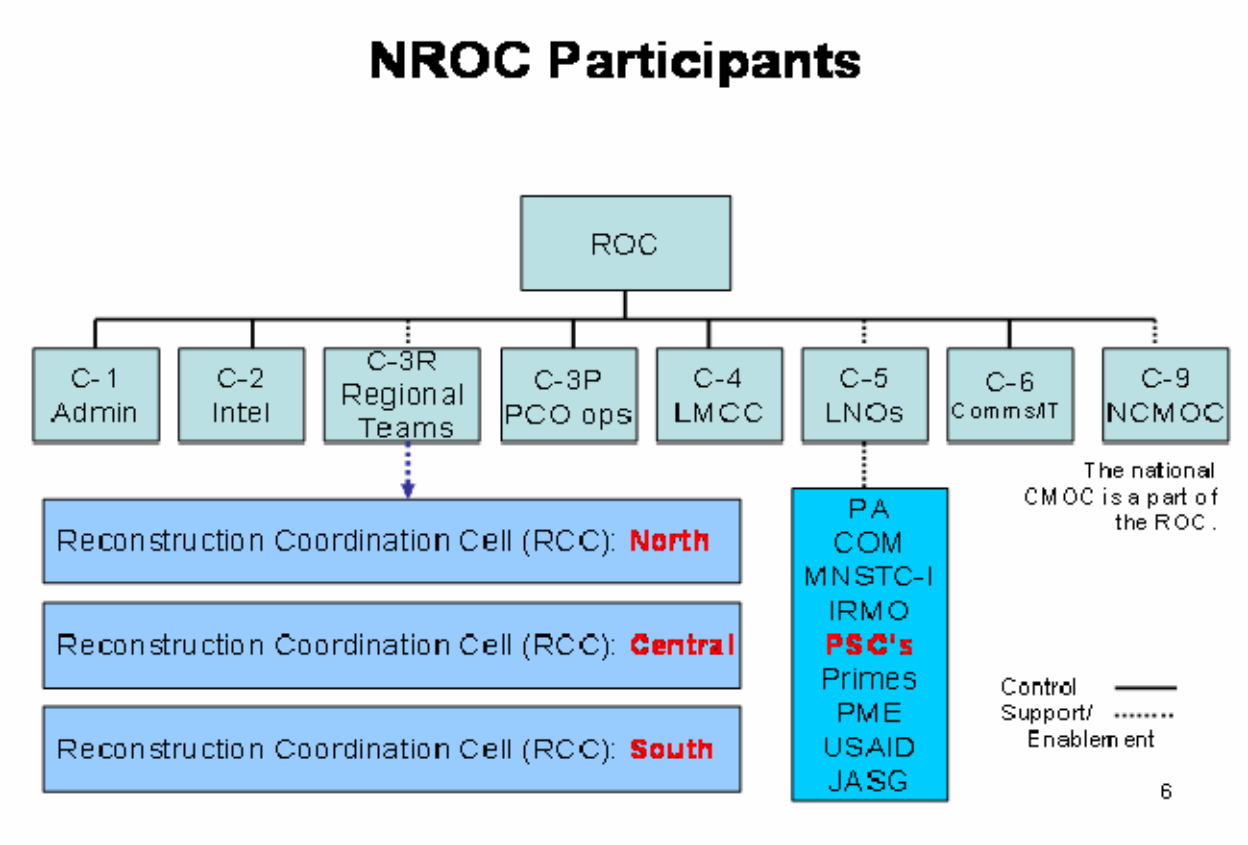

Figure 1. NROC Participants

Source: From Col (Ret) Joe Schweitzer ROC presentation to MajGen Heine

c. NROC Capabilities

Joint Publications 1-02 defines an operations center as, "The facility or location on an installation, base, or facility used by the commander to command, control and coordinate all crisis activities." (JP 1-02) The NROC's intent was precisely this, to

[9] Staff functional areas are generally laid out and organized with the following functional areas: administration, intelligence, operations, logistics and communications. Higher level staffs may use additional functional areas such as plans and civil-military operations.

serve as the national headquarters for the reconstruction effort and as the nerve center of the command and control effort.

Col (Ret) Joe Schweitzer served as director of the NROC from its inception in October 2004 to February 2005, and stated that the foundation of the ROC concept was to provide situational awareness, a common operating picture, and be the mechanism for both military and contractors alike to use to improve coordination during reconstruction. According to Col Schweitzer, the ROC "provided unity of effort in the absence of unity of command."

As the de facto headquarters element of reconstruction, one of the NROC's missions included remaining firmly plugged into operations at each of its five subordinate regional ROCs. (Described in the next section) In coordinating the efforts of PSCs and military operations, the NROC functions in two primary ways:

- Intelligence push: The NROC collects unclassified intelligence from each of the five regions to provide an overall intelligence picture of the country, identifying trends and enemy tactics, techniques and procedures. Additionally, the NROC will push national level intelligence to include political, religious or economic information that may affect the operations of both PSCs and the military alike. (Schweitzer, 2006)
- Consequence management assistance: in the event that one of the subordinate Regional ROCs are not able to reach local military units in a crisis situation, the NROC serves as a backup. Tied directly into the Multi National Forces Iraq (MNFI), the NROC is able to quickly request assistance in the form of the evacuation of injured personnel or quick reaction force. (Schweitzer, 2006)

d. Organizational Structure of the Regional ROC (RROC)

Even the best network and communications architecture cannot replace face-to-face coordination at the lowest level. While the NROC is capable of providing an overall picture of reconstruction and assisting in the coordination of PSCs and MSCs, it is

not capable of working directly with tactical commanders on day-to-day operations. For this reason, the RROCs were established and operated in conjunction with MSCs in that unit's AOR.

The regional tier places a RROC in each of Iraq's five main reconstruction zones. To facilitate face-to-face communication, RROC locations were co-located with the MSC headquarters and structured according to Figures 2 and 3 below.

Of the five RROCs seen in Figure 2, three are operated by US forces. Baghdad and Mosul RROCs coincide with US Army division AORs while the Fallujah RROC maintains a habitual relations ship with either I or II Marine Expeditionary Force. The remaining two RROCs match with coalition partners Poland in Diwaniyah and the Great Britain in Basrah.

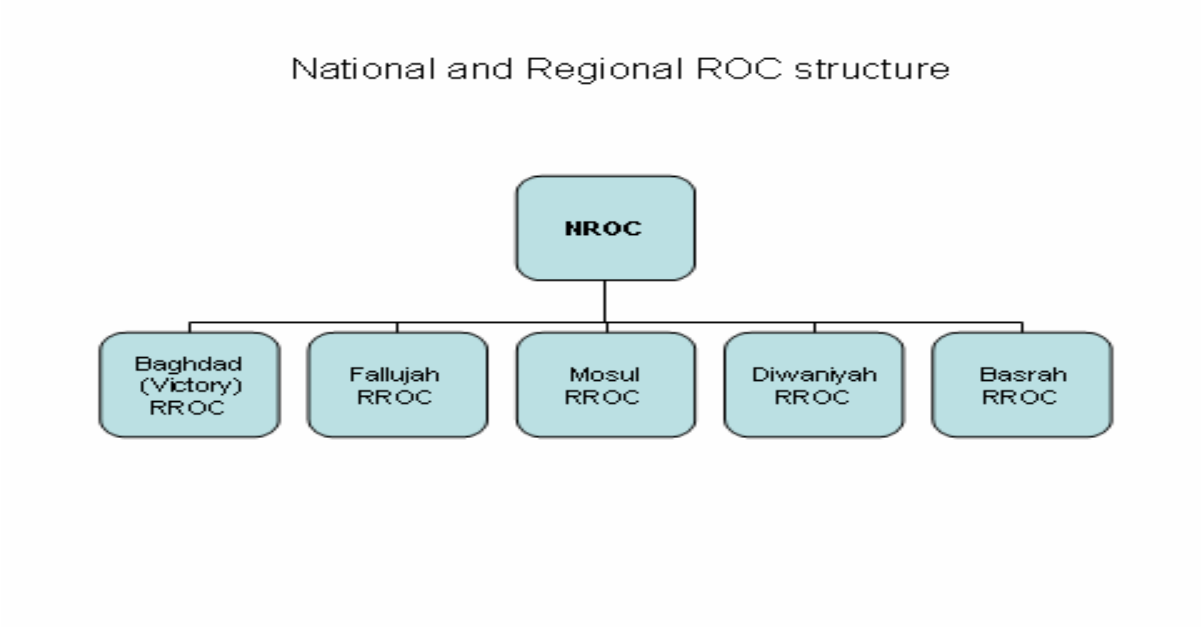

Figure 2. RROC Layout
Source: From Mr. Guy Winter RROC presentation

Figure 3. RROC Locations and Approximate MSC AORs

Source*:* From http://members.cox.net/intelbriefing/Iraq_Map.jpg and GAO, 2005

Figure 3 shows the locations of each of the RROCs and the approximate boundaries associated with each co-located MSC. For PSCs and MSCs, the RROC is where the rubber meets the road and where policy is put into practice on a daily basis. As both figures show, the five RROCs coordinate their efforts within their respective zones. (GAO, 2005)

e. RROC Capabilities

The interface between MSC and PSC, the RROC provides many key services, three of which are outlined below:

First, is the sharing of intelligence information. As the central repository of all information, the RROC acts as a collection activity of intelligence pushed from the

NROC, the military and other PSCs operating in Iraq. Through a process of declassification, MSC liaison officers provide local, unclassified intelligence to the RROC for dissemination to contractors. Likewise, PSCs that operate in the local area provide the same. The intelligence picture is updated daily via password protected websites and phone conversations between headquarters and briefings with the MSC. Intelligence updates and analysis are provided upon request as well as for specific sites or routes.

Often times PSCs are familiar with areas not traveled by traditional military forces. In these cases, excellent firsthand intelligence can be garnered from the PSC. (GAO, 2005) Possessing many former military special operations personnel, PSCs are often the best form of intelligence on the ground. PSCs routinely provided detailed information on routes, enemy activity and in some cases have even video taped routes within certain areas of operations. This information would be turned over to representatives at the RROCs for dissemination to other PSCs and MSCs. (Schweitzer, 2006)

The RROC's second main service involves communications and information flow between both PSCs and the military. The lack of commonality of communications hardware greatly restricts direct communication via tactical channels. Tactical military communications operate using classified frequency sets and encryption keys enabling transmissions to be secure and free from intercept and/or jamming. PSCs do not enjoy the same level of sophistication in their communications assets, therefore, it makes the two sides unable to communicate via secure means while operating. Though both sides could communicate via un-encrypted radios, this is not the preferred method and done so only in emergency situations.

The RROC alleviates many of these problems by being the center for both sides' activities. As described by AEGIS's senior representative of the RROC in the Al Anbar Province, Mr. Guy Winter,[10] a standardized process of route and mission clearance

[10] Mr. Guy Winter, at the time of this report, is 13 months in to an 18 month tour of duty as AEGIS's senior representative in the Fallujah RROC.

does exist with slight variations between each of the RROCs. Figure 4 is indicative of those processes used by the MEF and its associated RROC in Fallujah. (Winter, 2006)

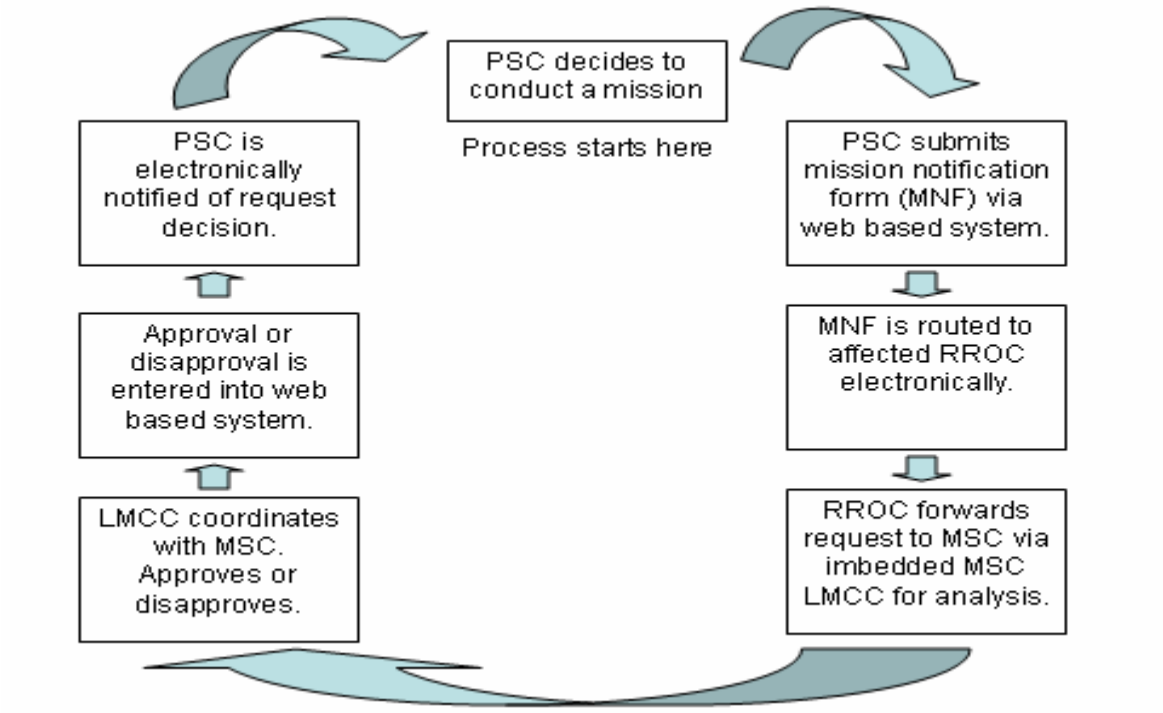

Figure 4. PSC Movement Request Process
Source: From Mr. Guy Winter

Figure 4 shows the relatively simple process currently used by the Fallujah RROC and I MEF. The process is done entirely by electronic, web based communications. I MEF policy currently require that all requests be submitted no later than 72 hours before commencement of movement. If a mission is denied and the PSC proceeds without authorization, the convoy will be turned around at one of a number of road checkpoints and any calls for assistance will be ignored. (Winter, 2006)

If approved, PSCs are provided several key services in support of their mission. First, contact numbers are given for each MSC affected by the PSC's movement. These numbers are generally cellular or satellite phones to be used in the event that un-secure communications are necessary. Next, the RROC and imbedded MSC logistics movement control center (LMCC) ensure the affected MSCs are notified

of all pertinent data to include convoy route, size, description, destination, communications capability and any special requirements. Third, RROCs have the capability to track and monitor convoys via attached global positioning systems that provide the center with real-time updates to PSC convoy locations. In the event of an immediate need for assistance, these attached global positioning systems come equipped with a distress feature that can be activated by the PSC convoy commander without the need to pick up a handset or cell phone.

Finally, and possibly the most important, the RROC is a PSC's 911 emergency call center. On the dangerous roadways of Iraq, PSCs are challenged virtually every time they travel. Problems on the road range from broken-down vehicles to engagements with anti-coalition forces and on occasion brushes with coalition forces. In any of these cases, where military assistance is required, the RROC is capable of contacting the nearest unit to coordinate the support such as quick reaction force (QRF), evacuation of injured personnel, medical assistance, security and air support to name just a few. (GAO, 2005) The RROC also has the ability to contact the NROC for assistance if needed.

The ROC system of command and control has evolved into a functioning mechanism that serves as a 'go between' for MSCs and PSCs. MSCs, particularly the Marine Expeditionary Force in Al Anbar Province have embraced the RROC as a tool to be used to coordinate their efforts in their AOR. MEF Future Operations Officers and planners who were interviewed reported the use of the RROC in weekly resource allocation working groups to validate and confirm civil affairs requests for consideration. (Wallace, 2006)

The exchange of information seems to be limited to the above information however. When asked about the de-confliction of the MEF's offensive operations, any exchange of fire support plans or tactical control measures via the Advanced Field Artillery Tactical Data System (AFATDS), both RROC and MEF personnel stated that the relationship has not evolved to this point yet since this would require the addition of more Marines to the RROC capable of taking possession of and declassifying operations orders, graphics and fire plans.

5. Staffing of the ROC System and Command Relationships

While led and directed by an active duty US military officer, both the NROC and RROCs are run and manned by contracted AEGIS personnel accompanied by coalition and Iraqi liaison teams. Each center's responsibilities are carefully segregated between AEGIS contractors and military directors and liaisons.

a. The Military Side of the ROC System

Military personnel serve as directors of the ROC system, though according to one anonymous director this title is rather honorary and does not connote the authority to make any changes to ROC manning or operation. The MSCs remain plugged into the ROC system through the use of liaisons and attached movement control cells. The military director focuses heavily on actual reconstruction efforts associated with the particular region. When asked about the formal command relationship that exists between AEGIS and the military director, one RROC director noted:

> I am technically the OIC or military sponsor of AEGIS, but they operate so well that I add very little value. …they are so professional and good at their job that they really operate automatically.
>
> (Anonymous RROC director)

To make matters more complicated, none of the directors interviewed for this project were contracting or acquisition professionals. Once again, this left any decision regarding contract changes to a contracting officer who was often hundreds of miles away and in the case of the AEGIS contract, on the other side of the world in Virginia.

b. The AEGIS Side of the ROC System

As noted in a previous section, AEGIS personnel are primarily the operators inside the RROC and serve as the engine of coordination. The AEGIS contractors control and manage the physical layout of the RROCs as well as conduct the actual face-to-face coordination with MSCs. One AEGIS director was quick to point out that he does not control or direct any active duty military personnel. Mr. Guy Winter noted the following when asked about his role and responsibility inside his RROC:

> From my perspective, I organize and run the physical RROC and provide the various functions that support the provision of a common operating picture. We therefore have an operations room with a tracking system (a civilian form of Blue Force tracker) for those PSCs that have signed up to GRD. I have a comms set-up and an intel capability to provide information on safe passage and threats. I organize the relationship with MEF for S2 and S3 so that they know what we are up to, and are kept up to speed on (non-tactical, non-military) movements through their battle space. This is done primarily through the MEF LMCC, who are now co-located with my operations room.
>
> (Winter, 2006)

Without question, AEGIS contracted personnel are conducting themselves professionally, effectively and with a high degree of distinction. Even during the initial stand up period of the NROC and RROC in October of 2004, then NROC Director, Col Joe Schweitzer stated repeatedly how professional and capable the AEGIS contractors were.

The problems encountered are not in the quality of the contracted work, but with the complex and often ambiguous chain of command inside which both contractors and military personnel are forced to work. There simply is no one point of contact, or one officer in charge regarding all matters involving the ROC system. Rather, the relationship between the two entities is on more of an even plain with no one entity truly able to direct the actions of the other.

Concerns also surface regarding the over indulgence and dependence on contracted help in this critical coordination function. Of primary concern is the issue of default by a civilian contractor. With over 80% of the ROC system run by AEGIS, the consequences of a breech of contract or walkout would be catastrophic to the operation of the ROC.

Finally, there is the question of what will happen to the ROC system when AEGIS' contract ends. There is currently no military or DoD plan to assume the role of operating the ROC and there is no planning or training being conducted in preparation for the next conflict's reconstruction phase.

6. Contingency Contracting Planning and Oversight

Many of the negative issues that have surrounded contingency contracting in Operation Iraqi Freedom and Operation Enduring Freedom can be tied to two central issues: a lack of effective deliberate planning for contracting operations and a lack of operational and strategic level oversight of contingency contracting officers.

a. Deliberate Planning for Contingency Contracting

Much has been written about the now infamous Contingency Contracting Support Plan (CCSP) included as part of the 1003V operations base plan. It has been well documented that the CCSP was too broad and did not address specific issues of contract support. According to the Contingency Contracting Student Handbook used at the Naval Postgraduate School, the following list provides a guide to the contents of the CCSP:

- Command and control relationships.
- Location and structure of the contracting office and sub offices, including which customers will be supported by each.
- Procedures for appointing, training, and employing Ordering Officers, Contracting Officer's Representatives, Disbursing Agents, and GCPC holders.

- Manpower, equipment and supplies required for contracting support and the deployment sequence.
- Types of supplies, services, and construction customers can expect to receive through contingency contracting; list any special prioritization or control measures for scarce commodities or services.
- Procedures for defining, validating, processing and satisfying customer requirements.
- Procedures for budgeting and payments to vendors.
- Procedures for closing out contracting operations and redeployment.
- Security requirements and procedures for contracting and contractor personnel.
- Specific statutory/regulatory constraints or exemptions which apply to the supported operation.
- Concept of contracting operations which is phased and synchronized with the supported plan.
- Description and assessment of Host Nation agreements, customs, laws, culture, language, religion, and business practices which will impact on contracting operations.
- Environmental impacts of the operation.

(DAU, 2003)

The bare bones version of the CCSP written for 1003V operations base plan contained few of these items. The majority of the contract planning that should have been completed as part of the deliberate planning process was left to be conducted in-theater in a rapid, reactionary manner. One reason for the poor contracting planning that was conducted during the deliberate planning process is the lack of contracting officer representation on the combatant commander's planning staff. The tendency of the logistics planners on the Central Command planning staff was to focus on their previous

experience during Operation Desert Storm where contractor involvement was very low and most service support was provided by military combat service support units.

b. Operational and Strategic Oversight

Once OIF commenced, there was no concerted effort by the combatant commander to unify the efforts of the many contingency contracting officers or provide any kind of joint strategic or operational level oversight to direct their efforts toward a common goal.

Contingency contracting officers were located with nearly every major subordinate command. These CCOs focused on tactical level issues that directly affected the command they were supporting. When interviewed, several CCOs reported they frequently executed contracts that overlapped services with adjoining units, never knowing the other unit was procuring the same service. This focus on the tactical, close-in issues continues today as the same CCOs have reported they do not believe it is part of their job to act as a liaison between contractors and the tactical commander that controls the area where they are working.

In January of 2005, the Joint Contracting Command – Iraq (JCC-I) was stood up to provide strategic and operational level coordination and direction to the contracting efforts throughout Iraq. The stated mission of the JCC-I is "Provide responsive *operational contracting support* to the Chief of Mission and Multi-National Corps - Iraq to efficiently acquire vital supplies, services and construction in support of the Coalition Forces and the relief and reconstruction of Iraq."

The JCC-I has made significant progress toward coordinating the efforts of the CCOs working throughout Iraq and has successfully leveraged the ability to create blanket contracts and purchase agreements to save significant amounts of money. However, the JCC-I did little to correct the issues of coordinating the movement and actions of contractors with the tactical commanders that were affected by the contractors.

7. Military Understanding of Reconstruction Operations

The reduction in organic military service support units and the increased role of contractors in the reconstruction phase of OIF has had another negative effect; tactical military commanders do not have a full understanding of the criticality of contractor reconstruction operations. The distinct separation of contractor and military roles has created a lack of understanding between the two on how the actions of one can affect the other. The lack of unity of command between these two entities has hampered the ability to fully integrate their efforts.

a. Transition from Military to Reconstruction Operations

From March to May of 2003, military offensive operations were the primary focus of OIF. Following President Bush's announcement of the end of hostilities on May 1, 2003, the focus has shifted from purely military operations. Over time, the relative importance of reconstruction operations has gradually increased, while the role of military operations has decreased and become more focused on supporting and enabling reconstruction. While this change is clear at the strategic level, it is not so obvious to commanders at the tactical level who may still view their primary goal as military victories, regardless of the affect on contractors.

b. Tactical Actions Have Strategic Effects

The actions of small military units operating at the tactical level or individual contractors can have large ramifications that can cause major shifts in strategy. An excellent example of this occurred in March 2004. Four employees of Blackwater were ambushed and killed in Fallujah, Iraq. A mob of Iraqis led by insurgents burned and mutilated the bodies and left two hanging from a bridge. (Mangini, 2005) The video of this event was seen around the world.

The outrage caused by this event prompted a major strategic change in the Fallujah region. The Marine Regiment responsible for this region had been prepared to

begin an operation the Commanding Officer referred to as a "hearts and minds" type campaign to increase trust between the local population and the Marine Regiment. This campaign plan was shelved and the regiment was instead called upon to begin major offensive operations in Fallujah to punish the insurgents responsible for the murders of the contractors. (Mangini, 2005)

c. The DoD Lacks Standardized Training on Contractor Operations

Prior to a deployment, military units receive extensive training packages to prepare them for the specifics of the theater of operations where they will be deploying. This training involves topics as diverse as local culture and religion, climate, local laws, survival training and rules of engagement. The DoD has not developed a standard training package to prepare commanders on how to interact and coordinate with contractors operating in Iraq. (GAO, 2005)

The lack of pre-deployment training on contractor operations further exacerbates the lack of understanding and sometimes adversarial relationships that develop between contractors and military commanders. Contractor operations and reconstruction operations in general is an area that few commanders have experience with prior to deploying to Iraq. A pre-deployment training program on contractor operations and the role of the ROC as a coordination node would greatly assist commanders with understanding the importance of reconstruction operations in OIF and how the actions of small unit commanders can have negative consequences on those operations.

C. SUMMARY

From mess hall briefings to web based request forms, GPS tracking systems and co-located operations centers, interaction between PSCs and MSCs in Iraq has evolved greatly since the commencement of reconstruction operations. This chapter has identified areas that pose continuing challenges to contractors and military units. Based on this chapter's previous analysis, the authors have identified five key challenges that affect the coordination of contractors on the battlefield. They are identified as follows:

1. Lack of Doctrine Defining and Organizing the ROC

The failure to plan for the scope of reconstruction operations and the sheer volume of contractors required to support those operations resulted in a coordination vacuum. The failure to provide an effective coordination function resulted in multiple contracts being awarded for the same requirement, essential services not being supported, conflicts between military units and contractors and needless kidnappings and deaths of contractor personnel. (GAO, 2005)

The DoD and the Joint Chiefs of Staff have published doctrine on nearly every aspect of command, control and coordination on the battlefield. The one notable absence is any doctrine that provides tactics, techniques and procedures for the management and coordination of the large volume of contractors required for effective reconstruction efforts.

2. Reliance on Contractors to Provide Critical Coordination Functions

The development of the ROC in such a short time by AEGIS Defence was an impressive accomplishment. It is questionable whether the DoD could have successfully developed, staffed and deployed a similar organization in the same limited time period; however the continued reliance on civilian contracting to manage and operate the ROC system is inappropriate.

The ROC has become a critical coordination node in Iraq. The loss of the coordination functions provided by the ROC would have serious negative consequences for the contractors and the military units that interact with them. The DoD currently lacks the ability to assume the coordination functions of the ROC in the event of default or termination of the AEGIS contract.

3. Discretionary Use of the ROC by Contractors

Currently, participation and use of the services provided by the ROC is voluntary and up to the discretion of each contractor. The voluntary use of contractor registration,

movement control and tracking means that the ROC, and therefore the DoD, does not have an accurate or complete picture of contractor movements and activities.

The incentive for a contractor to use the ROCs coordination functions is clear; coordinating movement through the ROC decreases the chance that the contractor will lose their life. Despite this significant positive incentive, some contractors still choose to opt out of the services provided by the ROC. There is no existing contract mechanism that mandates participation in the ROC or standardizes the contract language used for coordination of security, PSC management and subcontractors.

4. Lack of Contingency Contracting Planning and Oversight

The failure to include senior, experienced contingency contracting officers on the planning staffs of combatant commands has resulted in the publication of operation base plans that have sub-standard or non-existent contingency contractor support plans. The result of this failure to plan for contractor operations in Iraq resulted in financial waste through overlapping contracts. It also caused frustration for military commanders who struggled with the unfamiliar relationship with contractors and caused the needless deaths of contractor personnel.

5. Lack of Pre-Deployment Training for Military Commanders

The failure to provide pre-deployment training for military commanders on the significance of reconstruction operations in Iraq has continued to complicate the relationship between contractors and military commanders. (GAO, 2005) Many military commanders do not understand the lack of authority they have over contractors and do not understand the strategic effects that their actions can have.

D. CONCLUSION

Unity of command is a critical element of military success. Unity of command allows the commander to utilize all resources available toward a single overarching goal. The tactical commanders may not know exactly what their role is in the overall strategy, but with strong unity of command they know their actions are being coordinated toward a common goal. Contractors are a vital part of the resources that can determine whether the overall strategy will fail or succeed. The DoD must develop a means to include contractor operations under a strong unity of command.

When combined, the issues identified above exacerbate the difficulties in developing unity of command on the battlefield. All of these issues must be addressed and corrected in order for the DoD to exercise effective coordination of contractors on the battlefield as part of a total strategy.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. RECOMMENDATIONS AND CONCLUSIONS

A. INTRODUCTION

The purpose of this MBA Professional Report was to conduct an analysis of command and control relationships between civilian contractors and military units on the battlefield and identify any weaknesses in those relationships. The previous chapters examined the history of contracting on the battlefield that has led to the current heavy reliance on contractor support in Operation Iraqi Freedom (OIF) and identified many of the weaknesses concerning the lack of coordination between military units and contractors operating independently on the battlefield. Much of the authors' research focused on the use of private security companies (PSCs) and the new challenges their employment brings.

This chapter provides a number of recommendations that the Department of Defense may pursue in order to improve the coordination between military units and contractors operating on the battlefield. The overarching theme of these recommendations is to improve communication and formalize relationships between military commanders and contractors.

B. RECOMMENDATIONS

1. Publish Joint Doctrine Defining the Role of the Reconstruction Operations Center (ROC)

Currently, no doctrine exists on the establishment or employment of the ROC, either at the national or regional level. As described in the previous chapter, the ROC is a concept that was invented in OIF in response to the military's lack of control and accountability of contractors operating in Iraq. The degree of contractor involvement in OIF was unprecedented and few military planners envisioned the need for a separate coordination body just to monitor contractors.

The ROC has developed many ad-hoc methods of providing effective coordination and communication between participating contractors and military units; however, there is no documented plan on how to maintain the ROC after the current

contract expires. There is a real risk that when the contract with AEGIS expires, there will be a loss of corporate knowledge on how to run the ROC. The DoD must develop comprehensive turnover and lessons learned files in order to capture the accumulated knowledge, tactics, techniques and procedures that have been created by the national and regional ROCs in Iraq. Additionally, the DoD must develop a long term plan for the establishment and operation of the ROC in future conflicts.

It is recommended that the DoD develop doctrine for Joint Publication 3-0, Joint Operations that defines the role of the ROC as a coordinating function for future conflicts. This will recognize the importance of the coordination function provided by the ROC and ensure that future military commanders are aware of the role of the ROC as an information provider, assisting the commander in making tactical decisions that may affect contractor operations.

In addition to the inclusion in Joint Pub 3-0, the authors recommend that the DoD develop a new Joint Tactics, Techniques and Procedures publication that specifically present those processes successfully developed and employed by the ROC in OIF. These processes would include, at a minimum, movement control procedures, briefings, communication bridges, registration of contractors, convoy procedures and methods of deconfliction between PSCs and military forces.

2. Designate the Operation of the ROC a Military Function

Currently, the ROC system is run by AEGIS, a contracted private security company with military members acting as liaisons between the ROC and their respective commands. It is unclear what will happen when the current contract to support the ROC expires. No one is able to definitively say who will be responsible for maintaining the tactics and techniques that have been developed by the current contractor.

It is recommended that the management of the ROC become a military function, rather than the responsibility of a contracted company. Operation of the ROC could still be supported by contracted workers who could conduct much of the functional work, but the leadership and direction of the ROC should be provided by a military staff. This staff

could be either all DoD, or in a combined forces theater it could include representation from several Allied military forces.

The benefits and challenges of using contractor personnel for support staff in the ROC would need to be carefully examined by the DoD. While using contractor personnel creates an easy answer to manning questions, the contract language would have to be carefully crafted to ensure that the military Officer in Charge (OIC) of the ROC had the authority to direct the daily activities of the contractor personnel. If every order that the OIC issued was viewed as a contract change that had to be vetted through a Contracting Officer, the ROC would quickly become a pointless bureaucracy that accomplished nothing.

The method for operating the ROC could be based on the model of the Logistic Movement Coordination Center (LMCC) utilized by the Marine Expeditionary Force. The LMCC is a permanent structure that is minimally staffed by two officers and approximately eight enlisted members during peace time operations. In times of conflict or deployment, the LMCC will be supported by many additional officers and enlisted members, but the original staff provides the core expertise and direction.

A similar principle could be applied when designing a permanent ROC structure. This would ensure a continuity of processes even if the support personnel were provided by a contractor rather than military forces. Additionally, if contract support was used, the expiration and recompeting of the contract would not threaten the continuity of procedures and processes used by the ROC.

Placing the ROC under military command will facilitate dedicating more military communication and network assets to its operation. This will allow the ROC to tie into the combatant commander's common operation picture (COP) software. Tying into the COP will allow the ROC to have a current picture of the disposition of friendly and enemy forces. The ROC would also be able to update the COP with the location of contractors operating independently on the battlefield. This information would then be available to military forces planning operations in those areas

3. Make Participation in the ROC Mandatory for all Contractors that Operate Independently on the Battlefield Through a Proposed DFARS Clause

Currently, participation in the ROC is at the discretion of each contractor. There is no requirement for contractors to register with the ROC or report their movement activities. This minimizes the effectiveness of the ROC by not presenting a true picture of contractor activities and location to interested military commanders. Additionally, by not participating in the ROC's intelligence briefings and security updates, contractors are increasing the risk that they will become the victims of enemy actions.

Private security companies that fail to participate in the ROC's security updates are operating at increased risk to themselves and to US and allied military forces. The lack of knowledge of current military operations means that PSC escorts may find their planned route takes them into areas that are the target of military engagement or may cause confusion resulting in PSC escorts opening fire on military checkpoints.

The authors propose that all contractor personnel must register with the ROC and utilize the movement control and security update services offered by the ROC. In order to mandate these actions, it is recommended that a DFARS amendment be issued with contract clauses that are mandatory for contracts involving independent operations by contractor personnel on the battlefield. This clause would require participation in the ROC for all contractors and any sub-contractors, including PSCs, which operate independently on the battlefield. A draft DFARS clause is included in Appendix II.

The challenge with this recommendation will be enforcement. While it will be relatively easy to ensure that prime contractors and even first tier sub-contractors are registered with the ROC, it will be difficult to verify that lower tier sub-contractors who may be hired long after the prime contract is awarded are registered. While failure to register sub-contractors with the ROC may be considered to be cause for termination for default if this recommendation is adopted, it may not be feasible to pursue this as a means of enforcing this clause. Termination of a contractor on the battlefield who is otherwise performing well will be costly and disruptive for the DoD and the military forces being supported.

4. Increase Strategic and Operational Level of Contracting Planning

Until recently, no one command had cognizance or control over contingency contracting efforts in Iraq. Contingency Contracting Officers were operating purely at the tactical level with little oversight or coordination of effort. In January of 2005, the Joint Contracting Command – Iraq / Afghanistan (JCC-IA) was stood up to consolidate coordination of CCOs under one command. The JCC-IA is still struggling to firmly establish its mission but has been successful in its efforts to coordinate CCO efforts and leverage operational level effects. However, no effort has been made to ensure that operational and strategic contracting planning will be accomplished for the next conflict. The DoD should implement the Yoder 3-Tier model to ensure that individuals with significant contracting knowledge and experience are identified to work on planning staffs, ensuring that adequate attention is given to contracting issues during deliberate and crisis action planning. (Yoder, 2004)

5. Develop Pre-Deployment Training for Command Staffs at the MEF / Corps Level Concerning the ROC

Participation by all contractors that operate on the battlefield is critical to the success of the ROC's mission. However, the information gathered by the ROC is meaningless if tactical commanders do not understand how to use that information. The DoD should mandate training at the MEF / Corps level on the role of the ROC and potential effects of contractors operating independently in the commander's battle space.

Tactical commanders must adequately understand the role and importance of contractor operations. Military operations must be planned with contractor operations as a consideration. Current training and doctrine views contractor operations as a concern only for logisticians and not for combat forces. A shift in this attitude is required to ensure that commander's fully consider the effect of operations on contractor efforts. Receiving training prior to deployment will allow and encourage commanders to include contractor issues in their tactical planning.

C. CONCLUSIONS

The system that developed in Iraq of using regional ROCs supported and coordinated by a national ROC has grown into a highly capable coordination system, but it requires subtle changes to make it more effective. Mandatory participation by all contractors and more effective coordination with military forces will increase the benefits that are attained. Ultimately this will lead to increased coordination between contractors that will reduce duplication of effort and more importantly will reduce the incidence of friendly fire and contractor deaths.

The coordination function performed by the ROC should be viewed as a critical military function on the battlefield. The ROC should receive a level of support similar to a Joint Operations Center. The increased reliance on contractor-provided services to sustain military operations demands that the DoD take a more hands-on approach to coordinating the movement and actions of contractors on the battlefield.

The ROC is a vital function when contractors are operating independently on the battlefield. This critical coordination center should not be a contracted function, but should be established as a military command defined by joint doctrine. The tactics, techniques, procedures and lessons learned must be preserved so this function may be repeated in the next conflict without experiencing the same steep, and deadly, learning curve.

D. AREAS FOR FURTHER RESEARCH

1. Communication Assets Needed for the ROC

The functionality of the ROC is highly dependent on robust communication assets. The minimum communication methods necessary would include secure and open voice and data transmission equipment as well as secure data processing capability. What specific assets are required for the ROC (national and regional) to effectively track and coordinate the efforts of contractors operating independently on the battlefield, maintain a current intelligence picture and provide the means to deconflict military

activity with contractor functions? Where will these communications be sourced from and who will be responsible for maintaining and operating the equipment?

2. Manpower Analysis of Personnel Required to Operate the ROC and Identify Sources for Those Personnel

When the ROC is fully functional in an operational environment, how many people will be required to adequately staff the ROC and what is the right mix of rank and skills required to effectively carry out the command and control functions? Is it advantageous to create a permanent staff that will maintain the skills needed to run the ROC at times when the ROC is not required? Where should the personnel assigned to the ROC be sourced from?

3. What Must be Done to Incentivize Contractors to Fully Cooperate with the ROC

Will mandatory participation in the ROC create a strong disincentive to contractors who would otherwise make offers for contracts on the battlefield? If so, what incentives can be built into contracts for contractors to fully cooperate with the ROC?

4. How can Classified Intelligence be Used to Inform Contractors that May Not Have Adequate Security Clearances

Contractor personnel and PSCs will be able to make informed risk decisions if current and accurate intelligence briefings are available on local threat conditions. What intelligence sharing methods can be used in the ROC to ensure contractors are aware of potentially dangerous situations while preventing unauthorized disclosure of classified material to contractors that do not posses adequate clearance?

5. Should the Department of State Assume Control of the ROC Functions From the DoD at the End of Phase IV Operations

As a theater moves from military conflict to reconstruction, the role of the DoD will begin to shrink and the role of the DOS will grow. Is it appropriate for the DOS to

assume responsibility for running the ROC at some point in the transition? Does the DOS have the manpower and skill required to provide the command and control function? Is the function of the ROC still necessary once military operations are complete?

APPENDIX A. QUESTIONNAIRES

A. CIVILIAN CONTRACTOR QUESTIONNAIRE

Purpose of Questionnaire: To collect real world examples and insights regarding the interaction between tactical units and civilian contractors in a battlespace. This information will be processed and used in support of the Naval Postgraduate School, School of Business and Public Policy research project requirement.

Project abstract: The purpose of this research project is to examine the issues concerning the command and control of civilian contractors in a combat environment. Outsourcing of non-military specific job functions to civilian contractors has produced unexpected complications when examined in the context of an extended war-time scenario. The objectives of this project are to identify the weaknesses of current command and control doctrine as it applies to civilian contractors and to identify issues faced by tactical commanders created by civilian contractors operating in their battlespace. The product of this project will be a potential course of action that the Department of Defense can pursue to correct any deficiencies in the command and control of civilian contractors.

Instructions: This questionnaire is unclassified. Be as specific and detailed as you can. Please answer questions to the best of your ability and return to Major Matt Howes at mfhowes@nps.edu NLT 30 July 2006. Questions can be directed to Major Matt Howes at 831 241 0137 or mfhowes@nps.edu.

Definitions: For purposes of this questionnaire the following definitions from Joint Publication 1-02 apply:

Command and control: The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of a mission.

Battlespace: A geographical area, usually defined by lateral, forward, and rear boundaries assigned to a commander, by a higher commander, in which he has responsibility and the authority to conduct military operations.

Communications: The management of one unit's ability to exchange information with another.

Information management: The exchange of facts, data or instructions in any medium or form.

Contingency management: The management of any emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response, and special procedures to ensure the safety and readiness of personnel, installations, and equipment.

Questions

1. What capacity did you serve and with whom? (For example: Executive, security specialist, team leader/ KBR, DynCorp, Blackwater etc)

2. Where did you serve? (For example: Al Anbar, Kuwait, etc)

3. When did you serve overseas with the company and capacity stated above?

4. In the above stated capacity what relationship, if any, did you have with a U.S. Government contracting officer or contracting officer representative?

5. What issues concerning battlespace management did you encounter while serving overseas? (For example: Military control measures, permissive/restrictive fire support and airspace coordination measures) Please be as specific as possible with dates, military units etc.

6. What issues concerning communications did you encounter while serving overseas? (For example: ability to talk to/with military units? Did you or the military coordinate communications links? Liaison requested? How did it work if coordination was done? Terminology differences, lack of procedures?)

7. What issues concerning information management did you encounter while serving overseas? (For example: what level of information were you provided? Did you request? Did you think you needed? Intel, questions on terrain, weather, friendly/enemy situations, IEDs, adjacent units, 'manifest' data provided, list of phone numbers, timeline, route?)

8. What issues concerning contingency management did you encounter while serving overseas? (For example: Did you coordinate for such things as use of a military's quick reaction force, Medevac, tactical recovery of aircraft and personnel, non combatant evacuation operation)

9. Are there any mechanisms or policies in place currently that assist you coordinating your movements within a military battlespace? (For example: movement control centers, non official or official DOD websites, Air Tasking Orders etc)

10. What recommendations would you make as to how to fix any problems of command and control between civilian contractors and the military in a battlespace?

11. In your opinion what is the biggest issue regarding civilian contractor and military management in a battlespace?

12. Please relay any additional personal experiences regarding civilian contractors and the military in a battlespace.

13. Would you be willing to be contacted by the parties who developed this questionnaire for telephonic interview or follow up regarding some or all of the answers you provided? (For example: To request copies of company after action reports, clarification or to add depth of answers)

14. Would you like to remain anonymous in all follow up published reports or papers? YES ___ or NO ___

15. Would you like to view the final written report prior to publishing? YES ___ or NO ___

16. Name: (Will be kept confidential for purposes of this project)

17. Email address: (Will be kept confidential for purposes of this project)

18. Phone number: (Will be kept confidential for purposes of this project)

19. Are you willing to be quoted or cited in this research project? YES ___ or NO ___

B. TACTICAL COMMANDER QUESTIONNAIRE

Purpose of Questionnaire: To collect real world examples and insights regarding the interaction between tactical units and civilian contractors in a battlespace. This information will be processed and used in support of the Naval Postgraduate School, School of Business and Public Policy research project requirement.

Project abstract: The purpose of this research project is to examine the issues concerning the command and control of civilian contractors in a combat environment. Outsourcing of non-military specific job functions to civilian contractors has produced unexpected complications when examined in the context of an extended war-time scenario. The objectives of this project are to identify the weaknesses of current command and control doctrine as it applies to civilian contractors and to identify issues faced by tactical commanders created by civilian contractors operating in their battlespace. The product of this project will be a potential course of action that the Department of Defense can pursue to correct any deficiencies in the command and control of civilian contractors.

Instructions: This questionnaire is unclassified. Be as specific and detailed as you can. Please answer questions to the best of your ability and return to Major Matt Howes at mfhowes@nps.edu NLT 30 July 2006. Questions can be directed to Major Matt Howes at 831 241 0137 or mfhowes@nps.edu.

Definitions: For purposes of this questionnaire the following definitions from Joint Publication 1-02 apply:

Command and control: The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of a mission.

Battlespace: A geographical area, usually defined by lateral, forward, and rear boundaries assigned to a commander, by a higher commander, in which he has responsibility and the authority to conduct military operations.

Communications: The management of one unit's ability to exchange information with another.

Information management: The exchange of facts, data or instructions in any medium or form.

Contingency management: The management of any emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid

response, and special procedures to ensure the safety and readiness of personnel, installations, and equipment.

Questions

1. What capacity did you serve and with whom? (For example: S3, FAC, FSC, AirO, CO, XO)

2. Where did you serve?

3. When did you serve overseas with the unit and capacity stated above?

4. In the above stated capacity, what relationship, if any, did you have with the supporting Marine Corps contracting officer?

5. What issues concerning civilian contractors and battlespace management did you encounter while serving overseas? (For example: Any violation of control measures, permissive/restrictive fire support and airspace coordination measures) Please, be as specific as possible with dates, civilian companies, etc.

6. What issues concerning civilian contractors and communications did you encounter while serving overseas? (For example: ability to talk to/with civilian contractors. Did the civilian contractors make efforts to coordinate communications links, liaison requested? How did it work if coordination was done? Terminology differences, lack of procedures? Blue force tracker?)

7. What issues concerning civilian contractors and information management did you encounter while serving overseas? (For example: what level of information were they provided? Did they ask for? Do you think they need? Intel, questions on terrain, weather, friendly/enemy sits, IEDs, adjacent units, 'manifest' data provided, list of phone numbers, timeline, routes?)

8. What issues concerning civilian contractors and contingency management did you encounter while serving overseas? What effect did it put on your unit's ability to conduct operations? (For example: QRF, Medevac, TRAP, NEO)

9. If specific problems were encountered, what actions did you take internal to your organization to mitigate the effects of contractors in your battlespace? (For example: SOP changes, recommended changes to MCOs/DivO/RegO,MEFO active seeking out of contractors, 'road guards' or OPs to observe who enters your battlespace, inform HHQ and request guidance)

10. If civilian contractors were found operating in your battlespace without coordination, what actions did you take or whom did you inform?

11. Are there any mechanisms or policies in place currently that assist you in your duties regarding command and control of civilian contractors inside of a battlespace? (For example: TMCC, non official or official DOD websites etc)

12. If specific problems were encountered, what recommendations would you make to fix the problem of command and control of civilian contractors in a battlespace?

13. In your opinion what is the biggest issue regarding civilian contractor management in your battlespace?

14. Please relay any additional personal experiences regarding civilian contractors in your battlespace. (For example: Sea stories?)

15. Would you be willing to be contacted by the parties who developed this questionnaire for telephonic interview or follow up regarding some or all of the answers you provided? (For example: To request copies of unit AAR, clarification or to add depth of answers)

16. Would you like to remain anonymous in all follow up published reports or papers? YES ___ or NO ___

17. Name: (Will be kept confidential for purposes of this project)

18. Email address: (Will be kept confidential for purposes of this project)

19. Phone number: (Will be kept confidential for purposes of this project)

20. Are you willing to be quoted or cited in this research project? YES ___ or NO ___

C. CONTINGENCY CONTRACTOR QUESTIONNAIRE

Purpose of Questionnaire: To collect real world examples and insights regarding the interaction between tactical units and civilian contractors in a battlespace. This information will be processed and used in support of the Naval Postgraduate School, School of Business and Public Policy research project requirement.

Project abstract: The purpose of this research project is to examine the issues concerning the command and control of civilian contractors in a combat environment. Outsourcing of non-military specific job functions to civilian contractors has produced unexpected complications when examined in the context of an extended war-time scenario. The objectives of this project are to identify the weaknesses of current command and control doctrine as it applies to civilian contractors and to identify issues faced by tactical commanders created by civilian contractors operating in their battlespace. The product of this project will be a potential course of action that the Department of Defense can pursue to correct any deficiencies in the command and control of civilian contractors.

Instructions: This questionnaire is unclassified. Be as specific and detailed as you can. Please answer questions to the best of your ability and return to Major Joe Butkus at jjbutkus@nps.edu NLT 5 Aug 2006. Questions can be directed to Major Joe Butkus at jjbutkus@nps.edu.

Definitions: For purposes of this questionnaire the following definitions from Joint Publication 1-02 apply:

Command and control: The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of a mission.

Battlespace: A geographical area, usually defined by lateral, forward, and rear boundaries assigned to a commander, by a higher commander, in which he has responsibility and the authority to conduct military operations.

Communications: The management of one unit's ability to exchange information with another.

Information management: The exchange of facts, data or instructions in any medium or form.

Contingency management: The management of any emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid

response, and special procedures to ensure the safety and readiness of personnel, installations, and equipment.

Questions

1. Where and when did you serve as a Contingency Contracting Officer (CCO)?

2. Were you part of a Joint Contracting Office?

3. What issues concerning civilian contractors and battlespace management did you encounter while serving overseas? (For example: Any violation of control measures, permissive/restrictive fire support and airspace coordination measures) Please, be as specific as possible.

4. What issues concerning civilian contractors and communications did you encounter while serving overseas? (For example: ability to talk to/with civilian contractors. Did the civilian contractors make efforts to coordinate communications links, liaison requested? How did it work if coordination was done? Terminology differences, lack of procedures? Blue force tracker?)

5. What issues concerning civilian contractors and information management did you encounter while serving overseas? (For example: what level of information were they provided? Did they ask for? Do you think they need? Intel, questions on terrain, weather, friendly/enemy sits, IEDs, adjacent units, 'manifest' data provided, list of phone numbers, timeline, routes?)

6. What issues concerning civilian contractors and contingency management did you encounter while serving overseas? Were you ever asked to help coordinate planning for issues such as Medevac, TRAP, NEO for civilian contractors?

7. If specific problems were encountered, what actions did you take to mitigate the effects of contractors in a unit's battlespace? For example, what efforts were made to deconflict issues between the tactical commander and the contractor.

8. If civilian contractors were reported to be operating in a unit's battlespace without coordination, what actions did you take to rectify the situation?

9. Are there any mechanisms or policies in place currently that assist you in your duties regarding command and control of civilian contractors inside of a battlespace? (For example: TMCC, non official or official DOD websites etc)

10. If specific problems were encountered, what recommendations would you make to fix the problem of command and control of civilian contractors in a battlespace?

11. In your opinion what is the biggest issue regarding civilian contractor management in your battlespace?

12. Please relay any additional personal experiences regarding civilian contractors on the battlefield. (For example: Sea stories?)

13. Would you be willing to be contacted by the parties who developed this questionnaire for telephonic interview or follow up regarding some or all of the answers you provided? (For example: To request copies of unit AAR, clarification or to add depth of answers)

14. Would you like to remain anonymous in all follow up published reports or papers? YES ___ or NO ___

15. Name: (Will be kept confidential for purposes of this project)

16. Email address: (Will be kept confidential for purposes of this project)

17. Phone number: (Will be kept confidential for purposes of this project)

18. Are you willing to be quoted or cited in this research project? YES ___ or NO ___

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX B. DRAFT DFARS CLAUSES

A. 252.225-70XX REQUIREMENT FOR CONTRACTOR PERSONNEL TO REGISTER WITH THE RECONSTRUCTION OPERATIONS CENTER

(a) *Definitions*. As used in this clause—

"Chief of Mission" means the principal officer in charge of a diplomatic facility of the United States, including any individual assigned to be temporarily in charge of such a facility. The COM is the personal representative of the President to the country of accreditation. The COM is responsible for the direction, coordination, and supervision of all US Government executive branch employees in that country (except those under the command of a US area military commander). The security of the diplomatic post is the COM's direct responsibility.

"Combatant Commander" means the commander of a unified or specified combatant command established in accordance with 10 U.S.C. 161.

"Contractor personnel" are civilians accompanying or supporting the US Armed Forces.

"Independent operations" means work or actions conducted by contractor personnel in areas of the theater of operation that are not under direct control of US or allied military forces.

"Other military operations" means a range of military force responses that can be projected to accomplish assigned tasks. Such operations may include one or a combination of the following: civic action, humanitarian assistance, civil affairs, and other military activities to develop positive relationships with other countries; confidence building and other measures to reduce military tensions; military presence; activities to convey messages to adversaries; military deceptions and psychological operations; quarantines, blockades, and harassment operations; raids; intervention operations; armed conflict involving air, land, maritime, and strategic warfare operations; support for law enforcement authorities to counter international criminal activities (terrorism, narcotics trafficking, slavery, and piracy); support for law enforcement authorities to suppress domestic rebellion; and support for insurgency, counterinsurgency, and civil war in foreign countries.

"Prime Contractor" means The entity with whom an agent of the United States entered into a prime contract for the purposes of obtaining supplies, materials, equipment, or services

of any kind. "Reconstruction Operations Center" (ROC) means the joint operations center tasked with the responsibility for tracking contractor personnel registration and movements within the theater of operations.

"Theater of operations" means an area defined by the combatant commander for the conduct or support of specified operations.

(b) *General*.

(1) This clause applies when Contractor personnel are authorized to accompany US Armed Forces deployed outside the United States in—

(i) Contingency operations;

(ii) Humanitarian or peacekeeping operations;

(iii) Other military operations; or

(iv) Military exercises designated by the Combatant Commander.

(2) Contract performance in support of US Armed Forces deployed outside the United States may require work in dangerous or austere conditions. The Contractor accepts the risks associated with required contract performance in such operations.

(c) *Registration.*

(1) It is the prime contractor's responsibility to ensure that all contractor personnel register with the ROC within seventy-two hours of arrival within the theater of operations and prior to beginning any independent operations. At a minimum, contractor personnel will provide –

(i) By name list of all contract personnel in the theater of operations,

(ii) Copy of the statement of work to include-

(A) Specific location of work

(B) Nature of work

(C) Estimated timeline for completion of work

(iii) Other information as required by the combatant commander or contracting officer.

(d) *Movement Coordination.*

(1) All movement of contractor personnel within the theater of operations will be coordinated with the combatant commander through the ROC using the appropriate transportation request form provided by the ROC.

(2) Routine movement requests will be submitted to the ROC no later than forty-eight hours prior to movement.

(3) Urgent movement requests will be coordinated by the ROC on a prioritized basis.

(e) *Security.*

(1) Contractor personnel operating independently within the theater of operations will be responsible for providing their own security. This may be provided internally or sub-contracted through a private security company and must be in accordance with DFARS 252.225-70XX.

(i) Contractor personnel are responsible for all costs associated with protection of contractor and US Government employees from the actions of terrorists and criminals, protection of base camps, security escort to facilitate movement of personnel and equipment, hardening of facilities, procurement of hardened vehicles and procurement of protective gear as required.

(2) The combatant commander and/or the chief of mission may prescribe minimum requirements for security personnel, equipment and qualifications.

B. 252.225-70XX. REQUIREMENT FOR CONTRACTOR PERSONNEL TO REQUIRE PRIVATE SECURITY COMPANIES TO REGISTER WITH THE RECONSTRUCTION OPERATIONS CENTER

(a) *Definitions*. As used in this clause—

"Chief of Mission" means the principal officer in charge of a diplomatic facility of the United States, including any individual assigned to be temporarily in charge of such a facility. The COM is the personal representative of the President to the country of accreditation. The COM is responsible for the direction, coordination, and supervision of all US Government executive branch employees in that country (except those under the command of a US area military commander). The security of the diplomatic post is the COM's direct responsibility.

"Combatant Commander" means the commander of a unified or specified combatant command established in accordance with 10 USC. 161.

"Contractor personnel" are civilians accompanying or supporting the US Armed Forces.

"Independent operations" means work or actions conducted by contractor personnel in areas of the theater of operation that are not under direct control of US or allied military forces.

"Other military operations" means a range of military force responses that can be projected to accomplish assigned tasks. Such operations may include one or a combination of the following: civic action, humanitarian assistance, civil affairs, and other military activities to develop positive relationships with other countries; confidence building and other measures to reduce military tensions; military presence; activities to convey messages to adversaries; military deceptions and psychological operations; quarantines, blockades, and harassment operations; raids; intervention operations; armed conflict involving air, land, maritime, and strategic warfare operations; support for law enforcement authorities to counter international criminal activities (terrorism, narcotics trafficking, slavery, and piracy); support for law enforcement authorities to suppress domestic rebellion; and support for insurgency, counterinsurgency, and civil war in foreign countries.

"Prime Contractor" means The entity with whom an agent of the United States entered into a prime contract for the purposes of obtaining supplies, materials, equipment, or services of any kind.

"Reconstruction Operations Center" (ROC) means the joint operations center tasked with the responsibility for tracking contractor personnel registration and movements within the theater of operations.

"Theater of operations" means an area defined by the combatant commander for the conduct or support of specified operations.

(b) *General.*

(1) This clause applies when contractor personnel engaged in independent operations utilize a sub-contracted private security company to provide protection for contractor personnel and work sites.

(2) Contractor personnel are responsible for the actions of sub-contracted private security companies.

(c) *Registration.*

(1) The prime contractor will ensure that private security company personnel register with the ROC within seventy-two hours of arrival in the theater of operations and prior to conducting security operations. At a minimum, contractor personnel will provide –

(i) By name list of all private security company personnel in the theater of operations and

(ii) Copy of the statement of work to include-

(A) Specific location of work

(B) Nature of work

(C) Estimated timeline for completion of work

(iii) Serialized list of all weapons operated by the private security company.

(iv) Frequencies or cellular phone numbers used by the private security company for internal communication.

(d) *Movement Coordination.*

(1) All movement of contractor personnel within the theater of operations will be coordinated with the combatant commander through the ROC using the appropriate

transportation request form provided by the ROC.

(2) Routine movement requests will be submitted to the ROC no later than forty-eight hours prior to movement.

(3) Urgent movement requests will be coordinated by the ROC on a prioritized basis.

(4) Private security company personnel are responsible for receiving a security update from the ROC no earlier than four hours prior to commencing movement.

LIST OF REFERENCES

AEGIS Defence Service Limited, *Statement of Work, Reconstruction Security Support Services (RSSS) contract number W911SO-04-C-003.* (2005). Unpublished manuscript. Retrieved August 3, 2006.

Avant, Deborah D. (2006). The Privatization of Security: Lessons from Iraq. *Foreign Policy Research Institute.* Spring, 2006. Elsevier Ltd.

Bitanga, E. (2006). Howes M. (Ed.), *Some Help.* Email. Retrieved May 15, 2006.

Bremer, Paul L. (2004). Coalition Provisional Authority Memorandum 17. June, 2004. Baghdad, Iraq.

Bush, J. (2006). *Use of Private Security Companies by Diplomatic Security in Support of Operation Iraqi Freedom: Lessons Learned.* Thesis, Master of Science of Strategic Intelligence, Joint Military Intelligence College.

Cahlink, G. (2004). Filling out the Ranks in Iraq. *Government Executive, 36*(19), 32.

Cahlink, G. (2005). Oversight Overhaul. *Government Executive, 37*(10), 38.

Campbell, J. C. (2005). *Outsourcing and the Global War on Terrorism (GWOT): Contractors on the Battlefield.* Retrieved June 7, 2006 from http://cgsc.cdmhost.com/u?/p4013coll3,322;

Defense Acquisition University. (2003). *Contingency Contracting Student Handbook.*

Department of Defense. (1990). *Continuation of Essential Services*, DoD Instruction 3020.37,

Department of Defense. (2005). *Contractor Personnel Authorized to Accompany the US Armed Forces*, DoD Instruction 3020.41.

Department of the Army. (2000). *FM 100-21, Contractors on the Battlefield* (1st ed.). Washington, D.C.

Department of the Army. *Iraq Project and Contracting Office.* (2005). Retrieved July 20, 2006, from http://cpolwapp.belvoir.army.mil/iraq-pco/

Dew, N. (2004). *Note on Value Chain Analysis*. Naval Postgraduate School, Monterey, CA.

Dew, N. (2006). Strategic Management Class Discussion on Warriors for Hire. Naval Postgraduate School, Monterey, CA.

Douglas, K. L. (2004). Contractors Accompanying the Force: Empowering Commanders with Emergency Change Authority. *The Air Force Law Review, 55*, 127.

Dunn, R. L. (2005). *Contractors on the 21st Century Battlefield*. Edgewater, MD.

Dunn, R. L. (2006). *Contractors Supporting Military Operations.*

Dunn, R. L. (2005). *Contractors in the 21st Century "Combat Zone"* University of Maryland, Center for Public Policy and Private Enterprise, School of Public Policy.

Fortner, J. A. (2000). Managing, Deploying, Sustaining, and Protecting Contractors on the Battlefield. *Army Logistician, 32*(5), 3.

Francis, David J. (1999). Mercenary Intervention in Sierra Leone. *Third World Quarterly,* April 1999.

Hoskin, K. M. (2003). *Civilians Accompanying the Force* (AD-A414 597 ed.). Carlisle Barracks, PA: US Army War College.

Howes, M. (2006). Special Agent John Bush Interview. Monterey, CA.

Joint Contracting Command-Iraq Contract Number *W914NS-05-R-2042.* (2005). Retrieved October 30, 2006,

Joint Contracting Command-Iraq Contract Number *W91GXY-06-R-0050.* (2006). Retrieved October 30, 2006,

King James Version. *The Bible, The Old Testament*.

Luse, C., Madeline, C., Smith, L., & Starr, S. (2005). *An Evaluation of Contingency Contracting: Past, Present and Future.* Professional Report, Masters of Business Administration, Naval Postgraduate School, Monterey, CA.

Lynch, Colum (1997). For U.S. Firms War Becomes a Business. *Boston Globe*

Mandel, Robert. (2002). *Armies Without States.* Lynne Rienner. Boulder, CO.

Mangini, T. (2005). In Gaviria M., Smith M.(Eds.), *Private Warriors*. Boston, MA: Frontline. Public Broadcasting System.

McMillon, C. (2000). *Contingency Contracting Within the Department of Defense: A Comparative Analysis.* Thesis, Masters of Science Contract Management, Naval Postgraduate School, Monterey, CA.

Merriman, J. (2006). Final FY2006 Defense Authorization Act has Major Implications for Acquisition. [Electronic version]. *Acquisition Directions, Jan* 2006.

Miller, S. (2005). DCMA Director Visits North Texas Chapter. *Contract Management, 45*(5), 68.

Milton, G. (2004). *Contingency Contracting Guide / Lessons for Navy Contracting Officers.* Professional Report, Master of Business Administration, Naval Postgraduate School, Monterey, CA.

Murray, J. W. (2005). Contract Management in Iraq: Murphy's Law in Action. *Contract Management, 45*(7), 50.

Novak, R. M. (2004). *Going to War with Defense Contractors : A Case Study Analysis of Battlefield Acquisition* (AFIT/GAQ/ENV/04M-08 ed.)

Office of Management and Budget. (2003). *Circular No. A-76 (Revised).* Washington D.C.

Phinney, D. (2005). Marines Jail Contractors in Iraq. *Corpwatch*, July 11, 2006. Retrieved July 11, 2006, from http://corpwatch.com/

Prahalad, C., & Hamel, G. (May-June 1990). The Core Competence of the Corporation. [Electronic version]. *Harvard Business Review*, pp 79. Retrieved November 13, 2006.

Priest, D. (2004, Apr 6). Private Guards Repel Attack on US Headquarters. *The Washington Post,* pp. A.01.

Quigley, T. (2006). Contracting in the Middle East: What Was it Like Over There? *Contract Management, 46*(3), 26.

Reconstruction Operations Center. Iraqi map. (2006). Retrieved September 10, 2006, from http://members.cox.net/intelbriefing/Iraq_Map.jpg

Schweitzer, J. (2005). *ROC Overview to MG Heine, Deputy Director, IROM.* Unpublished manuscript. Retrieved August 25, 2006.

Schweitzer, J. (2006). In Howes M. (Ed.), *Reconstruction Operations Center Interview*. Monterey, CA. Retrieved August 18, 2006.

Singer, P. W. (2003). *Corporate Warriors: The Rise of the Privatized Military Industry*. Ithaca, New York, USA: Cornell University Press.

Singer, P. W. (2004). *Warriors for Hire in Iraq.* Brookings Institute.

Singer, P. W. (2004, Jun 15). Nation Builders and Low Bidders in Iraq. *New York Times,* pp. A.23.

Singer, P. W. (2005). Outsourcing War. *Foreign Affairs, 84*(2), 119.

Styskal, M. (2006). In Howes M. (Ed.), *Command and Control of Contractors on the Battlefield Questionnaire*. Retrieved May 15, 2006.

Svabek, S. (2005). Post-Liberation Iraqi Procurement Processes Part 2 of 2. *Contract Management, 45*(8), 44.

Svabek, S. (2005). Pre-Liberation Iraqi Procurement Processes Part 1 of 2. *Contract Management, 45*(7), 44.

Sweatt, G., & Skinner, S. C. (2005). Contracting in Iraq. *Contract Management Magazine, 45*(1), 38.

United States Congress. United States Congressional Code, Title 10. Uniform Code of Military Justice.

United States Government Accountability Office. (2003). *Contractors Provide Vital Services to Deployed Forces but are not Adequately Addressed in DoD Plans* (Report to the US Senate No. GAO-03-695). Washington D.C.: GAO. (Military Operations) Retrieved May 23, 2006.

United States Government Accountability Office. (2005). *Rebuilding Iraq Actions Needed to Improve Use of Private Security Providers : Report to Congressional Committees.*http://purl.access.gpo.gov/GPO/LPS64249.

United States Marine Corps. (1996). *Command and Control* (PCN 142 000001 00 ed.). Washington, DC: Headquarters, US Marine Corps.

United States Marine Corps. (1997). *Logistics* (PCN 142 000003 00 ed.). Washington, D.C: Headquarters, US Marine Corps.

United States, Joint Chiefs of Staff. (2002). *Department of Defense Dictionary of Military and Associated Terms.* Retrieved July 11, 2006, from. http://purl.access.gpo.gov/GPO/LPS14106;

Urey, R. G. (2005). *Civilian Contractors on the Battlefield* (AD-A431 808 ed.). Carlisle Barracks, Pa: US Army War College.

Vernon, R. R. (2003). *Battlefield Contractors, Time to Face the Tough Issues.* Retrieved on June 7, 2006 from http://handle.dtic.mil/100.2/ADA417077;

Wallace, T. (2006). In Howes M. (Ed.), *RROC Interview*. Retrieved October 26, 2006.

Weeks, D. A. (2005). Serving as a COTR in Iraq. *Contract Management, 45*(7), 54.

Winter, G. (2006). In Howes M. (Ed.), R*eply from VR on PSCs and the RROC email*. Retrieved October 6, 2006.

Winter, G. (2006). In Howes M. (Ed.), *RROC and PSC questions, email.* Retrieved October 26, 2006.

Winter, G. (2006). *Mission Notification Form Submitting Procedure.* Retrieved November 14, 2006.

Wood, D. (2003, July 31, 2003). Some of Army's Civilian Contractors are No-Shows in Iraq. [Electronic version]. *Newhouse News Service.*

Yoder, E. C., "The Yoder Three-Tier Model for Optimizing Contingency Contracting Planning and Execution," Naval Postgraduate School, Working Paper, 2004.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Fort Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California

3. Marine Corps Representative
   Naval Postgraduate School
   Monterey, California

4. Director, Training and Education, MCCDC, Code C46
   Quantico, Virginia

5. Director, Marine Corps Research Center, MCCDC, Code C40RC
   Quantico, Virginia

6. Marine Corps Tactical Systems Support Activity (Attn: Operations Officer)
   Camp Pendleton, California

7. E. Cory Yoder
   Graduate School of Business and Public Policy
   Naval Postgraduate School
   Monterey, California

8. Ronald Tudor
   Graduate School of Business and Public Policy
   Naval Postgraduate School
   Monterey, California